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## Indian Central Cotton Committee Technological Laboratory.

# TECHNOLOGICAL REPORTS ON TRADE VARIETIES OF INDIAN COTTONS, 1938

RY

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### CONTENTS.

Introducti	on	•	• •	• •	••	• •	••	
Technolog	ical Reports—							
•	s supplied by th	a Kas	t In	dia Cott	on Ass	eneistic	))) '	
-		פשמד מי	0.110	uia con	оц до	ociatic	/11 ·	
1.	C. P. No. 1 .	•	• •	• •	• •	• •	• •	
2.	Berar	•	• •	• •	• •	• •	••	
3.	Khandesh .	•	• •	• •	• •	• •	• •	
4.	Nanded .	•	• •	• •	• •	• •	• •	
5.	Latur .	•	• •	• •	• •	• •	• •	
6.	Muttia	•	• •	• •	• •	• •	• •	
7.	Punjab-America	an	• •	• •	• •	• •	• •	
8.	Broach .	•	• •	• •	• •	• •	• •	
9.	Jagadia .	•	• •	• •	• •	• •	• •	
10.	Surat		• •	• •	•• *	• •	• •	
11.	Navsari .	•			•• •	• •	• •	
12.	Dholleras .	•			٠٠.	• •	• •	
13.	Kalagin .		• •	• •	•••	• •	• •	
14.	Kadi-Viramgan	1	• •	• •	• •	• •		
15.	Westerns .					• •		
16.	Farm Westerns					• •	• •	
17.	Kumpta .			• •			• •	
18.	Upland			• •		• •	٠.	
19.	Bijapur .		• •	• •		• •		
20.	Bagalkote .							
21.	Cambodia .							
22.	Tinnevelly .					• •	• •	
23.	Karunganni .					• •		
24.	A. R. Kampala						٠.	
25.	A. R. Busoga .							
26.	A. R. Jinja .						٠,	
(h) Catton	s supplied by th	a Bar	nhai	r Millon	'nore;	A pennin	tion .	
_			ניויום.	A TATTION	HCI9 1	2000010	eaon .	
1.	Farm Westerns		• •	• •	• •	• •	• •	
2.	Bailhongal .	•	• •	• •	• •	• •	• •	
3.	Broach .	•	• •	• •	• •	• •	• •	
4.	Karunganni .	•	• •	• •	• •	• •	• •	
5.	Nandyal .	. 11.	• •		• •	• •	• •	
6.	Northern Camb	•	••		• •	• •	• •	
7.		•	•• '	•••	• •	• •	• •	
8.		٠.٠	• •	• •	• •	• •	• •	
	Ujjain (Ujjain)		٠.	ر - السلود	. •• `	• •		I
	Ujjain (Mandsa		• •	· · · ·	• • •	• •		]
10.	Moglai	•	• •	• •		• •		1
11.	Westerns .	•	٠,	• •	• •	• •		I
12.	Miraj		• •	• •		• •		
13.	Surat	•	• •			• •	• •	
14.	Navsari .	٠	• •					
	Tiruppur Camb		٠,				• •	1
	Tiruppur Camb	odia					٠.	1
16.	Hubli Kumpta		• •					1
17.			• •	• •			• •	
18.	Kampala (Afric	an)		• •			• •	
19.	Busoga (African			• •				
, 20.	Jinja (African)	•		• •				ĵ
•					••	• •		
	s supplied by th	e Ahı	ned	abad Mi	llowne	ra' Ass	ociati	0
1.	Jagadia .					, ,		1
2.	Bawla						•••	

### INTRODUCTION.

ONE of the main functions of the Technological Laboratory is to undertake under known and reproducible conditions, spinning tests on Indian cottons. Upto 1929, these tests were confined mostly to samples supplied by cotton breeders and agricultural officers of the Provincial These samples represented either new Agricultural Departments. varieties which were under trial or cottons grown in connection with such field experiments as the effect of different amounts of irrigations. different rotation of crops, different dates of sowing, etc., etc. As most of the samples tested at the Laboratory for the Agricultural Departments are in the experimental stage, the results of the tests made on them are not published for general information, but are communicated only to the departments concerned. With the expansion of the Committee's schemes in the provinces and the general recognition of the importance of the Laboratory tests, the number of such samples went on increasing steadily, but there was a general feeling that the work of the Laboratory should also be made more directly useful to the trade and the industry. It was felt that this purpose would best be served by carrying out spinning tests at the Laboratory on such samples of representative trade varieties as form the bulk of the Indian cotton crop. In order to put this idea into effect arrangements were made with the East India Cotton Association, Ltd., Bombay, for the supply of fair average quality of different trade varieties of Indian cotton for which the results of spinning tests could be broadcast for general information. These tests which were first made on the 1929-30 erop, have since been repeated on the same varieties without a break in the past nine seasons. The samples for these tests are selected by the Standards Committee of the East India Cotton Association, who also very kindly value them and give their opinion regarding their staple, class, regularity, strength, etc., etc. The tests on these samples are made with two objects. In the first place, they place in the hands of the trade and the industry reliable information regarding the waste losses and the spinning performance of the chief representative types of Indian cotton. This information is available not only to merchants and spinners in India, but also to these in the foreign countries who import or wish to import Indian cotton for their use. Thus, the consumers of Indian cottons, both in India and abroad, obtain reliable information regarding the spinning quality of the different types of Indian cottons in each season. In the second place, as these tests are made every year on samples of fair average quality selected by an export and authoritative body like the Standards Committee of the East India, Cotton Association, their results taken over a number of years are useful in showing whether a particular variety of cotton is maintaining its quality or showing signs of improvement or deterioration. If any particular variety is found, from the data available for a sufficient number of years, to show signs of steady deterioration, which is regarded as being outside the seasonal fluctuation, then it is possible to undertake an investigation into the causes of this deterioration and to adopt

the necessary remedial measures. It is clear that, in the absence of any reliable data obtained under definitely known and reproducible conditions on samples of fair average quality, it would not be possible to say definitely whether or not any particular type is showing signs of deterioration. The deterioration may, therefore, go on undetected for a number of years when it might have been possible to check it by ensuring a supply of pure seed or development of a new type. The following is a list of cottons which are to be supplied each year by the East India Cotton Association, Bombay.

Cottons received from the East India Cotton Association :-

1.	C. P. No. 1	14.	Kadi-Viramgam
2.	Berar	15.	Westerns
3.	Khandesh	16,	Farm Westerns
4.	Nanded	17.	Kumpta
5.	Latur	18.	Upland
6.	Muttia	19.	Bijapur
7.	Punjab-American	20.	Bagalkote
8.	Broach	21.	Cambodia
9.	Jagadia	22.	Tinnevelly
10.	Surat	23.	Karunganni
11.	Navsari	24.	A. R. Kompala
12.	Dholleras	25.	A. R. Busogo
13.	Kalagin	26.	A. R. Jinja

During the current year all except Nanded. Farm Westerns, Upland and Cambodia were received from the East India Cotton Association.

At the same time as the foregoing acrangement was made with the East India Cotton Association, Idd., Bombay, it was also arranged with the Bombay Millowners' and the Ahmedabad Millowners' Associations. that some of their mill members would kindly supply to the Laboratory samples of early arrivals of different varieties of the Indian cotton crop. The object of making these tests was to place in the hands of the industry information regarding the waste losses and the spinning performance of different trade varieties in the early part of the season in order to enable the consumers to decide which of these cottons would be suitable for their mixings. These tests were begun in 1930-31, and have been continued upto the present scason. In view of the fact, however, that sometimes a mill using a particular style of cotton in one season decided not to purchase the same style in the following season, a certain amount of discontinuity has occurred in some of these varieties. However, so far as possible, efforts have been made to obtain, in each season, samples of the same varieties so that the results of tests in the successive seasons may also be comparable. As regards the valuation of these samples, this was kindly done by the Grader (Major Ellis Jones) upto 1931-32, but in the following seasons the mills supplying the samples were re-, quested to furnish their own valuation reports. The following is a list of

the cottons tested at the Laboratory under this arrangement with the Bombay and Ahmedabad Millowners' Associations:—

The following is a list of cottons which are to be received from the Bombay Millowners' Association each year:—

1.	Farm Westerns	11.	Westerns
2.	Bailhongal	12.	Miraj
3.	Broach	13.	Surat
4.	Karunganni	14.	Navsari
5.	Nandyal	15.	Tiruppur Cambodia
6.	Northern Cambodia	16.	Hubli Kumpta
7.	Bengals	17.	Hubli Upland
8.	Khandesh	18.	Kampala (African)
9,	Ujjain	19.	Busoga (African)
10.	Moglai	20.	Jinja (African)

During the current season Nandyal, Northern Cambodia, Navsari and Hubli Upland were not received for tests.

Cottons which are to be received from the Ahmedabad Millowners' Association each year are as follows:—

1. Jagadia

2. Bawla

3. Kadi

None of these cottons were received during the current year.

The plan followed in presenting the results of tests carried out on these cottons is very nearly the same as that adopted in the Technological Reports on Standard Indian Cottons. Each technological report gives the grader's valuation report, spinning master's report, and the table of spinning test results which show the waste losses, number of yarn breakages in the ring frame, the actual counts spun, the results of the lea test and the ballistic test, actual number of turns per inch, front roller and spindle speeds, drafts employed, estimate of yarn neppiness and yarn evenness and the physical conditions of temperature and humidity prevailing in the spinning room and the yarn testing room. There is, however, this difference between these reports and those on the Standard Indian Cottons that as fibre tests are not made on these trade varieties, these reports do not contain the fibre test results, nor any attempt has been made to summarise the results in the form of 'remarks.'

The supply of these samples together with the valuation reports has not been free from a certain amount of extra work on the part of those who have very kindly co-operated with me in these tests. My best thanks are therefore due to the members of the Standards Committee of the East India Cotton Association, Bombay, and its office-bearers and to the mills supplying the samples. My thanks are also due to Major Ellis Jones for valuing some of the samples, to Messrs. R. P. Richardson and V. V. Gupte for supervising the spinning tests and to Mr. V. Venkataraman for assisting me in the compilation of the test result tabels.

### 1,-C. P. No. 1 COTTON.

These samples have been very kindly supplied by the East India Cotton Association, aspection and approval by their Standards Committee, in accordance with an artent made with the Association to supply to the Technological Laboratory, for , samples of fair average cotton of the commercial crop.

le	Cotton.	Place.	Season.	Sample	Cotton.	Place.	Season.
				No.			
)	C.P. No. 1.	Katol .	. 1930–31	2654	C.P. No. 1.	Panderkora	1934-35
;	,,	Nagpur .	. 1931–32	3110	**	Nagpur	1935-36
:	,,	,, .	. 1932–33	3473	,,	Panderkora	1936-37
•	,,	Panderkora	1933-34	3939	59	**	1937-38

I.—SPINNING TESTS.

### TECHNOLOGICAL REPORTS

ON

# COTTONS SUPPLIED BY THE EAST INDIA COTTON ASSOCIATION LTD., BOMBAY.

These samples are of fair average quality of the representative trade varieties which form the bulk of the Indian Cotton crop. The samples were selected by the Standards Committee of the East India Cotton Association, who have also very kindly furnished the valuation reports regarding their staple length, class, regularity, strength, etc.

	Fairly clean,	Slightly stained; fairly clean.	Fairly clean.	Clean.	or genera. Clean.	Clean.	Fairly clean.	Fairly clean,
<i>,,</i>	Good,	Good.	Good and rot-	Rough.	Good.	Slightly rough.	Roughish.	Roughish,
d Neppiness	Well-ginned.	Well-glaned,	Well-ginned.	Weli-ginn≪l.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
** **	••	••	••		••	4.		
	Clean.	Clean.	Člean.	Clean.	Clean,	Clean,	Good even.	Clean,
	Good,	Good.	Fairly even and	Even and nep-	Good,	Good.	Good; nep-	Good: almost
	Very light ; 12.3	15.8 grams.	nep-free. 16.2 grams.	free, 15.9 grams,	16.3 grams.	12.2 grame,	free,	free of neps. 14.7 grams.
	Fully-pressed.	. "	••		••		٠	• ••

(b) Yarn :--

_							C. P. No.	1.			·
			•	1930-31.	· 1931-32.	1032-33.	1933-34.	1031-35.	1935-36,	1036-37.	1937-38.
••	••	••		Clean. Fairly oven. Practically free.	Clean.  Somewhat uneven.  Practically free.  Fairly slubby.	Clean. Fairly even. Free of nep.	Clean. Somewint uneven, Nep-free.	Clean, Somewhat uneven, Free of nep. A little slubby,	Clean. Even. Almost free of nep.	Almost clean, liven. Free of nep.	Clean, Even. Almost free of nep.
<u></u>	•••		•••	•••		••	••	••	••	••	٠.

inning Test Details and Results.—See Table 1 on page 3.

II.—REPORT OF THE STANDARDS COMMITTEE FOR C. P. No. 1 COTTON.

					C. P. No 1.			
	1930-31.	1931-32.	1932-33,	1933-34.	1934-35.	1935-36.	1036-37.	1037-38.
Contract valued under Fine C. P. No. 1.	Fine C. P. No. 1.	F. G. M. G. Broach No. 2.	F. M. G. Oomra Hedge Contract, No. 3.	Fine M. G. Comra (Borar) H. C. No. 3.	Fine M. G. Oomra Hodge Contract No. 3, March 1935 delivery.	Fine M. G. Commu- Hedgo Contract No. 3, March 1936 dolivory.	Fine M. G. Oomra Hodge Contract No. 3. March 1937 delivery.	Fine M. G. Comra Hedge Contract No. 3, March 1938 dolivery.
Class	Fine to Superfine.	Barely fine.	Superfine.	Fine to Superfine.	Strict Superfine.	Superfine to Extra Superfine.	Baroly fino.	Fino.
Colour	White.	Semowhat yellow- ish stans.	White	Dullish white.	Bright white.	Creamish white.	Creamy-white.	White.
Staple Length	5/8".	3/4".	6/8".	5/8".	11/16".	5/8".	.8/9.	6/8".
Staple Strongth	Regular.	Fair.	Fair.	Fair.	Fair.	Fair.	Modium.	Fair.
Regularity	Regular.	Bair.	Rogular.	Regular.	Fair.	Regular.	Fairly regular.	Rogular.
Value above or below Rs. 2 on. Contract rate.	Rs. 2 on.	Rs. 4 off.	Rs. 12 on.	Rs. 15 on.	Rs. 20 on.	Rs. 22 on.	Rs. 13 on.	Rs. 1k on.
Baris	Rs. 166.	Rs. 176.	Sottlement rate of F. M. G. Oomra Hedge Contract No. 3, March 1933 delivery Rs. 107.	Fine M. G. Comra (Borar) H. C. No. 3, March 1934 dolivery Rs. 100.	Fine M. G. Comra- Hedge Contract No. 3, March 1935 delivery Re. 226.	Fine M. G. Oomra Hodge Contract No. 3, March 1936 delivery Rs. 170.	Fine M. G. Oomra Hodgo Contract No. 3, March 1937 delivery Ra. 205.	Fine M. G. Oomra Hedge Contract No. 3, March 1938 delivery Rs. 166.
Date of Valuation	20-1-31.	9-5-32.	. 25-3-33.	7-2-34.	30-1-3ñ.	2-3-36.	26-1-37.	2.2.38.
Romarka	:	Black loaf.	:	:	:	;	:	:

COLLON.
1
No.
٦.
C. P
FOR
RESULTS
TEST
1.—SPINNING
Table

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rive Y (%).		Testing Room.	- 67	89	8	93	۱ ۶	8	g	2	7.5	88	6	8	2	2	g	8 8	8	89	3 8	3 8
Влатия Номботу (%).		Spinning Room.	49	98	8	99	žī.	99	8	22	5	8	89	15	. E	: z	٤	8	89	6	: 8	8
TEMPE- RATORE (°F).		Spinning Room.	88	18	16	68	128	87	88	88	Si Si	88	88	8	000	18	æ	8	81	8		e! 66
		Turns per inch. Actual.	12.0	13.0	12.1	13.8	13.1	13.8	14.9	12.5	14.0	12.0	13.6	19.9	13.8	13.5	12.9	13.8	14.3	65	13.9	13.1
		Neps per yard.	1.9	1.3	1.0	1.2	0.5	1.0	8.0	1.0	1.0	1.0	8.0	0.6	8	1.0	0.6	0.8	8.0	1.0	1.2	9
		Evenness class.	4	4	4	10	4	4	4	-*	۰.	4	ĸ	47	07	- +*	60		4		•	
SULES.		Connt-Work Product.	1957	2305	2088	2270	2230	2350	2351	2146	2376	2032	2230	9570	9626	2370	2391	2728	2304	2273	2456	2425
YARN TEST RESULTS.	Ballistic	Work of Rupture (inch-lb.)	190.0	232.8	208.8	225.0	220.8	226.0	180.0	916.8	237.6	100.2	210.2	8 776	908.8	188.8	234.4	278.4	180.0	8 666	238.4	108.8
Xark	_	Counts Actual.	10.3	0.0	10.0	10.1	10.1	10.4	4. 4.	9.0	10.0	10.2	10.3	10.6	10.4	12.6	10.2	9.8	12.8	10.2	10.3	12.2
		Count-Strength Product.	499	1004	070	686	¥02	1007	8	633	1150	430	935	1048	1533	006	726	1187	080	737	1001	1047
	LEA.	Strength (lbs.)	48.4	101.4	65.3	100.9	78.0	105.3	76.1	63.3	116.2	41.0	01.7	8.08	140.0	71.4	72.6	117.5	53.8	70.0	95.3	85.1
		Counts Actual.	10.3	9.9	9.8	9.9	9.6	10.1	12.2	10.0	0.0	10.4	10.2	10.5	10.5	19.0	10.01	10.1	12.8	10.1	10.5	12.3
		Tarns per inch.	12.63	14.29	12.63	14.29	12.63	14.29	15.61	12.63	14.29	12.63	14.20	12.63	14.29	13.03	12.63	14.29	14.68	12.63	13.58	15.51
Particulars.*		Draft.	5.21	5.21	5.44	5.56	5.26	5.41	5.02	5.35	5.36	5.12	5,13	5,36	5.26	. 30 80	5,48	5, 48	6.71	5.63	5.63	5.46
RAME PART	.M.9	Zbludle Zbeed, R.	0060	7500	5900	7600	6850	7700	2200	0009	7650	0010	7500	0060	8000	7300	7000	8200	7700	0400	7800	8400
RING FRA	,b90	Front Roller Sp. R. P. M.	197	193	176	102	171	101	182	176	196	17.6	196	194	000	188	196	300	188	193	210	300
	rod Dor	Yarn Breakages 100 spludles hour,	8	0	18	88	79	10	100	3	23	36	•	0	6	2	27	18	15	122	18	#
ors.	_	T.efe.I LateT	13.9	:	14.6	:	16.4	:	;	15.6	:	10.7	:	13.6	:	:	15.7	:	:	15.1	:	
Waste Percentages.	_	Spinning Loss.	0.0	<u>:</u> :	0.3	:	9	:	:	9.	:	0.1	:.	0.1	• :	:	0.3	:	:	0.3	:	:
iste P		Card Room Loss.	9.0	1: -	6	<u>:</u>	10.0	:	:	15.0	:	10.4	:	9.8	:	;	10.2	:	:	8.7	:	•
*		Blow Room Loss.	2.8	:	5.0	:	0.7	:	:	8.8	:	e .	:	4.1	:	:	5.8	:	:	0.0	;	.:
	, lbs.	Weight of Sample	8	<u>,                                     </u>	2		2			97		01		2			10	•		10		
		Counts Rominal.	TOT TOT	202	10A	10C	10.1	100	130	10.1	100	10.1	100	10.4	100	12.1	10.4	100	12B	10A	10B	130
		Date of Spinning.	19-3-31	13-3-31	13-6-32	14-5-32	1-4-33	1-4-33	3-1-33	11-2-34	11-2-31	8-3-35	8-2-35	0-3-30	9-0-36	14-3-30	1-2-37	1-2-37	4-2-37	0-2-38	10-2-38	10-2-38
		Scason.	1030-31	1930-31	1031-32	1931-32	1032-33	1932-43	1032-33	1033-34	1033-34	1034-35	1834-35	1035-30	1935-36	1035-36	1036-37	1030-37	1030-37	1037-38	1037~38	1937-38
		Cotton.	C.P. No. 1	:	C.P. No. 1	:	C.P. No. 1	:	:	C.P. No. 1	:	C.P. No. 1	:	C.P. No. 1	:	:	C.P. No. 1	^:	:	C.P. No. 1	:	:
		Somple.	4,	000		1336		1794	1724		2137		1902	•	3110	3110		3473	3473	Ī	3939	3030

The ring trans front roller diameter—17. Diameter of rings—14".
 It is to be noted that the total loss is for anall sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

### 2.—BERAR COTTON.

These samples have been very kindly supplied by the East India Cotton Association after inspection and approval by their Standards Committee in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season,
1004 1335 1723 2136	Berar "	Amraoti Murtizapur Amraoti Shegaon	1930-31. 1931-32. 1932-33. 1933-34.	2656 3264 3474 3926	Berar	Akote Akola Anjangaon Akola	1934-35, 1935-36, 1936-37, 1937-38,

### 1. Treatment :---

(a) Blow-room—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) Card-room—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

### (a) Cotton :---

									···	
_	_					Beri	R.			
		_	1930-31,	1031-32.	1932-33,	1933-34.	1934-35.	1935-86.	1936-37.	1937-33
Colour		••	White to crea- my-white; bright,	Creamy-white	White to crea- my-white	White; bright.	White to crea- my-white.	Creamy-white.	Creamy-white to white.	White to un-
Cleanliness	••		Trifle stained ; a little leafy.	Somewhat stained, leniy,	Leafy	Somewhat leafy.	Leafy	Slightly stain ed; leafy.	Fairly unclean a little stain- ed; contains	4
Feel Ginning and	 Keppli	 1055	Slightly harsh Well-glaned	Roughish	Good Well-glaned	Good-bodled			Fairly good	Fair.
ocous		••	0.75 per cent ungunned.		A fen steds		Many unglaned seeds.	A little knotted.	Well-glantd	Well-ginned.
Card Ellrer مصطمع	••	••		Pairly clean	Clean	Clean		Almost clean	tains a little	Clean.
Card web	••	••		G001	Fairly even and nep-free.	Even and nep- free.	Good	A little neppy and cloudy.	lcaf. Good : slmost nep-free.	Good; quit free of neps,
Weight of 10 Remarks	Ontstr	lps .,				14.6 grams	10.5 grams			15.8 grams.
. ——				Fully-pressed						

### (b) Yarn :--

				Bera	æ,			
Cleanlines	1930-31.	1931-32.	1032 53.	1950-34.	1934-35,	1935-30.	1936-37.	1037-38.
	l	Somewhat un-	Cu-v	1	Clenn	Almost clean . ,	Fairly clean	Clean.
epplaces	Free	even. Practically fre-	,	ł		í	Fairly even	Fairly even.
	Somewhat slub-		· ·	i i		,		Free of nep.
Remarks		<u> </u>		. 1	· Indby.		A little slabby	

<sup>3.</sup> Spinning Test Details and Results.—See Table 2 on page 6.

COMME	
CCTANDAKUS C	7
L	741
1	ă
-	II.—REPORT OF

	1937-38.		Fine M. G. Comra	h H. C. No. 3, Dec.		H. C. No. 3. No. 3, March 1930, 1930, Rully good to fine. Superfine.	Greamy-white.	5/8".	Fair.	Rogular	Rs. 5 on.	Fine M. G. Comra	Oomra Fine M. G. Oomra Fine M. G. No. 3, Merch Jan. 1938, delivery Contract H. C. No. 3, July 1937, delivery Rs. 154.	25-1-38.	:	
,	1098.37	Thoraca.		ine M. G. Compared of More	1937, delivery.	Fully good to fine.	Dull white.	5/8.	Good.	Fairly regular.		Pass.	ra Fine M. G. C. I.	Rs. 205.	:	
		1035-36.	- Cont	Sine M. G. Comra	H. C. No. 3, July	6007		Greyish white.	5/8".	Good. Regular.		Par.	ra Fine M. G. Oom	1936 Rs. 208.		_
	Benau.		1934-35.		ine M. G. Contract	No. 3, March 1939, delivory.	Extra suporfine.	White.	5/8".	Fair.	Fair.		ਲਂ ਹ	Ra Ra	30-1-35.	
			1033.34.	2001	M. G. Oomra (Borar)	H. C. No. 3.	Superfine.	Whito.	, 8/ u	Fair.	Regular.	; •	Rs. 3 on.	H. C. No. 3, Marc 1934 delive Rs. 190.	7.2.34.	:
THE STAND			-	1932-33.	The state of the s	M. G. Oomra neugo.	Superfine.				Fair. Remilar.		Rs. 5 on.	Settlement rate of F. F. M. C. No. 3, March Hedge H. C. No. 3, March No. 3, 1934 dolivery dolivery March 1933 dolivery Rs. 190.	Rs. 167. 25-3-33.	:
II REPORT OF THE STANDARY				1931-32.		F. G. M. G. Brosch F. M. G. Oomra Hung's No. 2.	Sully good to fine. Su		Bluish white with White yellow stains.		,	Regular.	Rs. 14 off.	Bs. 175.	9-5-32.	Black leaf.
					1930-31.			Fino.	Creany-white.	1/2".	Wook.	tregular.	ow Ro. 1 on.	Rs. 188.	5.3-31.	:
						Contract valued under Fine Comra No. 3.	•	Class	·	\$ • •	Staple length		Value above or below	Basis	e voluntion	Date or vandance. Remarks

Table 2.—SPINING TEST RESULTS FOR BERAR COTTON.    1			۱.	:		8	S	8	23	و ا	g	<u> </u>	Į:	2	z	   e	ę.	m	07	5	   2	ç,	ا ۾
Table 2.—SPINNING TEST RESULTS FOR BERAR COTTON.    19   1		ê	ATIAN	_	Tedlar Boom.	۰	-	l.°		"				-		"	<u></u>	_	_			_	
Table 2		ë	A JEEL		Spianing Room.	6.5	8	8	64	į.	8	8	2.	8	5	12	:	8	62	ខ	13	8	6
Table 2		a	CEMPIAL-		·moort Lalaniqe	16	83	ä	£	3	8.7	2	£	25	<b>5</b> ;	ä	53	50	5.	18	2	S	ž
Table 2.—SPINING TEST RESULTS FOR BERAR COTTON.   1		ä	==		Turas per inch. Actual.						11.0	1 .		2			13.6			13.7			13.1
Table 2.—SPINNING TEST RESULTS FOR BERAR COTTON.   The property late   Table 2.—SPINNING TEST RESULTS FOR BERAR COTTON.   The property late   Table 2.—SPINNING TEST RESULTS FOR BERAR COTTON.   The property late   Table 2.—SPINNING TEST   Table		8			Zela del Iquy.	1.0	6.0	0.5	1.0	2.0		1.0		::	3.0	6.	0.0	8.0	0,5	0.0			0.8
1   1   1   1   1   1   1   1   1   1		e:			Escaness Class.	4	41	3	-	7		-		ľ	"	F	n	n	n	•	·"	n	n
Table 2SPINNING TEST RESULIS FOR BERAR COTTON   The complete of the comple		12	Ę.		Count-Work Product.	1,369	1,937	1,799	1,00,1	1,910	2,463	2,167	2,301	1,903	31:	87.1		1,970	2,297	110	2,511	2,072	2,337
Table 2.—SPINING TEST RESULTS FOR BERAR COTTR   Table 3.—SPINING TEST RESULTS FOR BERAR COTTR   Table 3.—SPINING TEST RESULTS FOR It   15   15   15   15   15   15   15   1	Ä	S		ALEISTIC.	Work of Rupture (tack-lb.)			176.4	103.2	199.0	£ ₹			191.1	216.0	11	9,13		200.0	201.1	110.0	311.1	1.052
Table 2SPINNING TEST RESULTS FOR   11	OTTO	ę	King Ir		Counts Actual.	10 3	10.2	10,3	10.1	9.4			19.0	10.1	10.0		19.1	6.5	6.5	10.0		£.	10.1
Table 2SPINNING TEST RESULTS FOR   11	K C	- 1	, 	7	Count-Strength Freduct.	န္	ŝ	387	<u>5</u>	57	<i>Ţ</i> ,	a S	1022	fo <sub>7</sub>	313	Ē	7,01	E	210	£01	118	1153	ŝ
Table 2SPINNING TEST RESULTS FOR   11	BER	11		ret.	Crength (lbs.)	31.6				49.5	46.5		111.7		5:3	02.9	106.6	54.0	115.9		101.3	179.0	1.00
Table 2.—SPINNING TEST RESULTS   Sample   Culton.   Sample   Data   Sample   S	FOR	5			Counts Actual.	10.11			9.0		9.0	10.1	6.0	10.0		19.1	10.1	1.6	6.5	s. c	9.0	£.	10.2
Table 2.—SPINNING TEST    Table 2.—SPINNING TEST   Table 2.—SPINNING TEST   Table 3.		22			Turns per lach.				11.25				11.23	12,63	11,29	12.63	5.3	11.31	12.63	11.25	11.31	19.61	13.54
Table 2.—SPINNING TEST    Table 2.—SPINNING TEST   Table 2.—SPINNING TEST   Table 3.	RESU	=	CULARS.		Draft.	8.8	5.10			6.10		5, 47	5.	5.13		5.31	5.3	4.83	6.83	6.9	5.29	5.5	9.63
Table 2.—SPINNING  Spinits  No. 6		13		'T'	Spludle Speed, B.l	0320	7230	6000	7200	5450	1.700	6000	7650	c xy	1.500	1000	1930	388	0350	1700	6300	7200	2600
Table 2.		ដ		*pesd	Front Roller S. I. P. N.	150	189	27.0	ei E	171	101	170	100	0.7	5	ě	ş	2.	101	8	E02	112	e a
Table 2.	INNI	=		per liour.	Yarn Breshages Totalically por	000	9	165	173	139	ē	53	₹	SS	8	13	•	·	0	5	0	11	E
Table 2  Sample Cotton. Feason. Spinning. Dite of a 6 7 8 9 0  NV-STE Person. Spinning. Spinning. Spinning. Signification of a 2 8 9 0  NV-STE Person. Spinning. Spinning. Spinning. Signification of a 2 8 9 0  State of a 2 8 9 0 0  State of a 2 8 9 0 0  State of a 6 7 8 9 0  NV-STE Person. Spinning. Spinning. Spinning. Signification of a 2 8 0 0  State of a 3 8 0 0  State of a 4 8	SP	10	n		f.wol latoT	10.1	:	17.8	;		;		:		:	39.6	:	8	:	:	17.7	:	:
1   2   3   4   6   6   7   7   7   7   7   7   7   7	2.	۵			Splaning Loss.		;	0.6	:	0.0	:	9	:	0,3	;	::	;		;	:	9:0	:	:
1   2   3   4   6   6   7   7   7   7   7   7   7   7	Table	α,	115 FEB.			0.0	;	10.0	: 0	, p		19.3	;	10.7	:	. ::	:,	1:1	;	:	6.3	:	$\overline{\cdot}$
Sample Cotton. Scason. Spinning. Scason.	•	٨.	¥		Blow Room Loss.	9. B.	:	8.0	:	12.0	:	8.0	:	10.2	;	9.5	:	10.0	;	:	0.1	:	
Sample Cotton. Scaton. Spinning.  No. 1 1001		•		,ed	Weight of Sample, I	ä		2		9		2		92		2		2			9		
Sample Cotton, Season, Spining.  1001 Incar 1930-31 10-3-31 1001 Incar 1930-31 11-2-31 123 Incar 1932-33 11-2-31 133 Incar 1932-34 11-2-31 134 Incar 1932-34 11-2-31 135 Incar 1932-35 2-2-37 14 Incar 1933-38 1-2-33 15 Incar 1932-35 1-2-35 17 Incar 1933-38 1-2-35		•			Counts Nominal.	104	100	104	200	10.1	100	101	100	101	100	104	100	8,	813	100	₽4	838	TOIL
Sample Cotton, Scason.  No. 1001 Incar 1930-31 1001 Incar 1930-31 1001 Incar 1930-31 1133 Incar 1933-33 1134 Incar 1933-34 1135 Incar 1933-39 114 Incar 1933-39 115 Incar 1933-39 11 Incar 1933-39 11 Incar 1933-39 11 Incar 1933-39		¥			Date of Spinning.	16-3-31	17-3-31	13-5-32	14-5-32	1-4-33	3-4-33	16-2-34	14-2-31	6-2-35	8-2-35	6-7-36	7-7-30	2-2-37	2-2-37	2-2-37	1-2-28	_	1
2004 Merar 10004 Merar 10004 Merar 10004 Merar 10004 Merar 10004 Merar 1000 M		n				10:00-31	1030-31	1931-32	1931-32	1932-33	1932-33	1033-31	1933-34	1931-33	1011-35	1035-30	1035-36	1936-37	25-9001	1930-37	037-38	937-38	337-38
1 1 1001 NOO		61	-		Cotton.	Therair	· :	Herar	:	Herar	:	Berar	:	Derar	:	├	:	_				_	-1
· 1		-	۱.		Sample	300	1001	100	?	1727	1723	2130	25,18	2650	2636	├-	3201		3174	3174	_	_	

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28 | 1013 | ... '.. | ... | ... | ... | 19 | Red | D. 13 | 13,54 | 10,2 | 90,1 | 919 | 10,1 | 230,1 | 2,337 |

The sing frame from collect than exer-7/8°. Director of fines-1 5/8°.

It is to do noted that the total tors is for a small sample weighting to the ... for bulk a tonger mill can littens it would be less than shown letter.

### 3.--KHANDESH COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Collon.	Place.	Season.
1001	Khandesh	Dhulia.	1930-31.	2655	Khandesh	Dhulia.	1934-35.
1432	"	Chopda.	1931-32.	3265	**	Amalner.	1935-36.
1722	**	Dhulia	1932-33.	3475	"	Chalisgaon.	1936-37.
2138	**	,,	1933-34.	3925	23	Dhulia.	1937-38.

### I.—SPINNING TESTS.

### 1. Treatment :-

- (a) Blow-room.—Upto 1934-35:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

### (a) Cotton:--

						Knan	degr.			
-			1030-31.	1031-32.	1932-33.	1933-31.	1934-35,	1035-30,	1936-37.	1937-38,
Colour		••	W h i t e to creamy-white; fairly bright.	Duli creamy	White to creamy-white.	White to creamy-white.	White to creamy-white.	Crramy-white to creamy,	White to creamy-white.	White to creamy-white.
Cleanlines	s	"	A little leafy; occasional spot of stain.		Leafy	Lenfy; ocea- sionally stain- ed.	Leafy	Leafy; stained.	Leafy; a tride stained,	Very leafy.
Feel			Good		Good toftish	Good	Slightly rough.	Good	Roughish	Fair.
Olnnla neppi		n d 	Well-ginned	Fairly well-gin- ned.	Well-glaned	Well-glaned	Well-ginned .,	Somewhat knotted,	Well-gluned	Well-ginned.
Seeds	••	••	••	1.4% unglaned.	•• , .		"	Few unginned		
Card sliver	٠,,	••	Clean	Clean	Clean	Clean	Clean	Little leafy	Good ; Leafy.	Almost elenn.
Intd web			First class	Fairly good,	Itee.	Even and nep- free.	- 1	Teiflo neppy and cloudy.		Good : almost
Weight of Strips	ten ••	flat	10.1 grams ; very light.	15,8 grants	14.8 gtama	15.2 grams	17.1 grams	21.5 grams 4		16.1 grams,
Remarks	••	.,	,,	٠.,		]		A wasty sam- ple.	.,	٠ "

### (b) Yarn :--

***************************************		•				Knan	pesu,			<del></del>
			1930-31.	1031-92.	1932-83.	1933-31.	1934-85.	1935-36,	1036-37.	1037-38.
Cleanliness Evenness			L	t i	1	ł .		A little leasy Fairly even	Fairly clean	Almost clean, Fairly oven,
Keppiness			Pairly nep-free,	Practically nep-free.	Nep-ires	Nep-free ,.	Fairly free of nep,	Fairly free of nep.	Almost free of nep.	Free of nep,
Slubbiness Bemarks	••	 	., .,		"	 	A ""tile slubby.			

<sup>3.</sup> Spinning Test Details and Results.—See Table 3 on page 9.

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Table 3.—SPINNING TEST RESULTS FOR KHANDESH COTTON.

TIVE IX (%).		Testing Room.	67	69	69	ا ا	11	112	92	92	67	57	51	12	20	99	2	5	ę <u>1</u>	71	15	99	9.	8	6	. B
RELATIVE HUMBITY (%).		Spinning Room.	5	29	8	65	20	8	8	3	2	45	0,7	8	02	8	82	11	12	1.	2	67	99	8		8
TRMPER- 1 ATORE (°F).		emooff Lulaniqë	- E	83	33	3	8	22	80	87	22	81	33	S	81	33	8	87	87	98	18	63	83	82	18	8
	Ī	Turns per inch. Actual.	11.8	11.2	16.2	15.9	17.2	13.1	14.2	17.1	12.2	11.2	16. 1	15.0	13.8	16.0	12.3	14.2	15.3	10.4	12.3	13.6	10.3	61	13.5	11.2
		Yebs ber 2arg.	61	3.0	61	1.0	51	5:0	8.0	8.0	1.0	. 0.1	1.	1.5	61	1.2	1.0	1.5	0.8	1.2	1.0	.; 61	1.0	1.0	8.0	1.0
		Lyenness class.	-	13	9	n	or.	6:	n	-	-	13	6	-	10	12	*	ĸ	*	13	æ	4	÷		*	7
Į į		County Work Product	2,155	1,780	2,013	2,184	2,006	2,285	2,300	2,312	2,375	2,371	9,308	2,175	2,263	2,210	9,328	9, 197	9,396	2, 150	9,608	2,525	2,018	9,920 0	9,292	2,311
Yun Test Resours	BALLISTIC	Vork of Mup- ture (inch-lbs.)	2002	127.0	110.8	141.8	105.4	102.0	196.8	113.6	9:E3.0	200.1	171.6	210.0	181.1	155.6	61 121 131	2.002	1001	174.4	257.6	214.0	181.4	20.0	109.4	168.4
Yur TE	١.	.fauto Actual	10.3	11.0	11.3	15.4	10.6	11.0	11.8	10.1	10.1	11.5	13.5	0.0	12.3	11.2	0.0	11.0	12.9	14.1	10.1	11.8	14.3	9.6	11.5	11.8
		Count-Strength Product.	77.	110	61 62 63 64	1,241	1,156	SU	202	860	1,053	1,171	1,172	128	870	070	029	eş.	083	100	1,113	1,102	1,308	951	356	1,087
	fier.	, strongth (Iba.)	77.0	16.3	55.9	80.3	69.0	g. 7	82.0	1.4.3	106 \$	45.7	9.1×	87.1	9.00	68.7	67.0	63.0	81.8	01.0	109.1	03.4	91.5	00.1	71.9	1 93.1
		.fr.usə. sənnəə	10.1	13,8	14.7	15.7	19.6	12.0	12.0	16.3	9.9	13.6	13.8	10.0	12.6	14,2	10.0	11.0	12.0	11.0	10.2	11.8	14.3	9,0	0.11	11.8
		.Մարոչ քալ հոշի.	12.03	14.03	16.85	15.07	17.03	13.02	11.03	17.93	12.63	14.63	16.85	12.63	14.69	16.85	12.63	11.63	15.50	16.85	12.03	13.02	16.85	12.03	13.92	11.68
CT EARS.		.1)tat(L	13	0.83	6.07	5.11	5.54	5.21	5.21	5.78	5.71	5.44	6.38	5.37	5.38	6.13	5.33	5.31	5. 12	6.23	5.61	5.00	6.03	5.50	5.11	13 81
Resau Partice Lars.*		.boogs shade 12.9.11	6,830	6,330	8,730	2,550	0,000	1.300	1,930	8,700	2,000	7,630	8,500	6,930	2,000	8,250	0,930	8,000	8,750	8,800	0,000	2,000	8,300	008'9	7,100	7,700
lesa Fra	flos	Front Roller Sp It. P. M.	195	153	100	13.	221	100	108	17.6	100 1100	101	186	190	100	182	190	108	101	188	196	183	180	202	103	190
	'മ്മ്വ ദ	Yarn Dreakage per 100 splni per bour.	ន	ន	100	2	111	51	160	101	61	16	S	13	36	3	81	13	85	8	0	8	ध	•	12	13
		Total Loss.†	16.0	:	:	2g.3	:	19.8	:	:	21.7	:	:	30.0	:	:	1.8	:	:	:	21.1	:	:	21.0	:	:
CENTAGES,		.e20.I BulnulgE	0.0	:	• :	0.7	:	9.0	:	·:	4.0	;	:	7.0	:	:	0.1	:	:	:	6,0	:	:	6.0	:	:
Waste Percentages,	*65	Card Room Los	1.7	:		11.3	:	6.0	:	:	11.0	:	:	10.7	:	:	13.1	:	:	:	10.3	:	:	9.3	:	:
#	*bi	Dlow Room Lo	8.7	:	:	16.3	:	11.11	:	:	11.1	:	:	11.1	:	:	11.2	:	:	:	12.2	:	:	12.0	:	• :
-sq	i 'əld	mes to digio?/	ន			G		2			91			2			92				9			21		
	.lı	Counts Nomina	10.1	1#1	143	16.1	ន	11	128	161	10.4	12B	143	101	123	179	10.1	1213	190	£3	10.1	181	£	10A	12.	123
		Date of Splaning.	13-3-31	13-3-31	13-3-31	25-8-32	25-8-22	31-3-33	31-3-33	31-3-33	14-2-34	15-2-31	15-2-34	9-2-33	11-2-35	11-2-35	0-7-36	6-7-36	14-7-36	7-7-36	3. C-6	12-2-37	3-2-37	31-1-38	1-2-38	1-2-38
	<del></del>	Serson.	1030-31	1030-31	1930-31	1931- 32	1631-32	1032-33	1932-33	1935-33	1933-34	1933-31	1933-31	1934-35	1934-35	1034-35	1035-36	1935-36	1935-36	1935-36	1930-37	1930-37	1936-37	1937-33	1937-33	1937-39
	,	Sample No.	1001	1001	1001	1433	1432	1790	11	173 51	2138	2138	2138	2055	2655	2655	3265	3265	3205	3505	3475	3475	3475	3923	3863	3025

• Diameter of ting that the total loss is for a small sample weighing 10 lbs, or therembour ; for bulk sample spun under will conditions it would be less than shown here.

### 4.-NANDED COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Scason,	' Sample No.	Collon.	Scason.
669	Nanded.	1929-30.	2195	Nanded,	1933-34.
1003	••	1930-31.	2712	••	1934-35.
1338	••	1931-32.	3111	••	1935-36,
1725	••	1932-33,	3547	••	1936-37.

### I. SPINNING TESTS.

### 1. Treatment: -

- (a) Blow-room.—Upto 1934-35 (inclusive):--Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1935-36 and 1936-37: Hopper bale opener, Horizontal cleaner. Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and span from single hank roving on Ring Frame No. 1.

1934-35 onwards:—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

### (a) Cotton :--

					NAVDE	Þ			
-		1929-30.	1034 11	t931-72.	1012-31	L937-34.	1911-53	1935-36	1936-57.
Col sur	••	Creamy-while, brighti-la	White to ereamy. while,	i Cronus-widte	Creamy-white;	(Tesniyen hite,	Creum - white.	White.	Creatay-white; dulii-b.
Chaplines		Lesfs , n friffe	leafy, some nict tained	Leafs . women what staloed	feab.	Leafy; a little stained.	Leafs (very fine leaf),	Leafs.	Jeds.
fro f		teorel-legical		! !	√ıft.	ficel	Good,	thesi	tional
Chang and	չունեցը, ու	lattic well-	Well ground	••	Well-glanesh.	Nell ginned	Somewhat knoted	Well glaned	
Seels	••	ar,	1.2.	yama chi evel"	0.01 Caluard			Contains a lea full cleap recit.	Copialus a fen Ciran ecris
Card Sincr		! .	Clean	Allttle Enty.	Alapst clean	Clean	sughtly leaft.	A little leafs.	i little leite.
Card Web	••	L tritte neppy.	Vers puel	Good	Nepfue pud	Even 1	( ) little neppe.	itiond. {	A little nepps.
Weight of te	nfid drip	17.0 grams.	12 trum	17 × grame	17. 1 prims.	10.4 grains	21 6 grams.	11.3 grams.	,15.1 grans.
itemarks	 	talife strong	i I	1		***	<b></b>		

### (b) Yarn :--

	Ì				NAN	ved.			
•		1929-20,	10 30-51.	1931-32.	1032 33,	1033-34.	1031-37	1915-30.	1936-57.
	 					1		<del></del>	1
••	••	Clean	Clean	A tribe leafy.	Almost clean.	A little maty.	l'alth leafy.	Abstost clean.	A fittle lady.
••	••	Lven	Even in lower count.	Even	Even	Even in the ino lonez counts,	Lven.	Falth even.	Falth even
••	!	A triffe 1s ppy.	l little neppy.	Umost free of nep.	Practically free	Somon hat	Sepps.	A little neppy.	Херру.
		••	Higher counts a little slubby.	••			A little elubby.	••	••
••	•	••		••				·	••
			Clean Lven. A triffe neppy.		Clean Clean. A triffe leafy Lyon. Even in lower Even. count A triffe nappy. A little neppy. Ulmost free of mep Higher counts a little slubby.			Glean Clean A triffe leafy. Almost them. A lattle seafy. Pairly leafy. Lattle Even in lower Even. Even Even in the free Count A triffe mappy. A little neppy. Ulmost free of Practically free So on on h at Neppy Higher counts a little slubby.	1929-20. 1930-31. 1931-32. 1932-33. 1931-34. 1931-35. 1945-36.  Glean Clean. A triffe leafy. Almost them. A little seafy. Paidy leafy. Almost them. Lyon. Even in lower Even. Even Even intertuo Even. Faidy even. lower counts.  A triffe mappy. A little neppy. A little neppy. of mp.  Illights counts a little slubby.

<sup>3.</sup> Spinning Test Details and Results :- Sec. T. de 4 on page 12.

II.—REPORT OF THE STANDARDS COMMITTEE FOR NANDED.

*.*		••			NANDED.		•		
		1929-30.	1930-31.	1031-32.	1032-33.	1933-3-4.	1934.35.	1935-36.	1936-37.
Contract valued unde	:	F. G. Broach No. 2. F. G. Broach No. 2. F.	F. G. Broach No. 2.	G. M. G. No. 2.	Bronch F. G. M. G. Bronch F. U. M. G. H. C. No. 2. April/May delivery.	F. G. M. G. Broach April/May 1934 delivery.	F. G. M. G. H. C. No. S. May 1935	Broach F. G. M. G. Brouch 2, April/ delivery May 1936 delivery	Broach F. G. M. G. Broach J. April No. 2. delivery
Chass	:	Fully good to fine.	Fully good.	Finc.	Fine.	Fully good.	Fine.	Fino.	Good.
Colour	:	[A little dull.	Greivsh.	Considerably Bluish Whitish. White and stains.	-	Greyish white.	Greyish white.	Doll whitish.	Whito.
Sto, le Length	:	15, 16 inch.	5/8 inch.	13/4 tneh.	7/8 meh.	Full 7,8 inch.	7 Sinch.	7/8 inch.	7/8 inch.
Staple Strength	:	Vory strong.	Bair.	Fair.	Good.	Good.	Good.	Fair to good.	.Gnod.
Regularity	:	Rogular.	Irrogular.	Irregular.	A hit itregular.	Regular.	.Trwgulur.	Irregular.	Slightly Irregular.
Value above or below contract rate		Rs. 40 on F. G. Rs. 31 off. Broach April/May.	<del>-</del>	Rs. 15 on.	Rs. 15 on.	Rs. 25 on.	Rs. 60 on.	Rs. 23 on.	Rs. 20 on.
Basis	:	:	· · · · · · · · · · · · · · · · · · ·	F. 75	Sciilement rate of F. G. M. G. Broachj F. G. M. G. Broach F. G. M. G.Broach H. C. No. 2, April, H. C. No. 2, April May 1934 delivery May 1935 delivery May 1933 delivery Rs. 201.	F. G. M. G. Broach H. C. No. 2, April, May 1934 delivery Rs. 201.	F. G. M. G. Broach H. C. No. 2, April/ May 1936 dolivery Rs. 222.	Broach F. G. M. G. Broach F. G. M. G. Broach J. April/ H. C. No. 2, April/ H. C. No. 2, April/ dolivery May delivery Rs. 189.	f. G. M. G. Broach H. C. No. 2, April/ May delivery Rq. 246.
Date of Valuation	:	25-1-30.	5-3-31.	9-5-5-5	25-3-33.	15-3-34.	26.4.35.	2-3-36.	16.3-37.
Remarks		Net so ellky orwaxy Black leaf. as F. G. M. G. Labur.	Black leaf.	. :	:	:	:	;	With some black

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Table 4.—SPINNING TEST RESULTS FOR NANDED COTTON.

Yans Test Misuits,	Bvanb mc.	Count-Strength Counts Actual. Work of Rupture (Inch-lb.) Product. Zeps per yard. Luras per fuch A bylanlug Room.	20.4 110.2 2,332 4 4.2 17.2 81	8 127 0 2475 4 1.2 19,2 82 60	20	80	59 65	29 06	- -	1	. 3	3		5 19,1 44 71 72	22.2	8 17.2 88 60 65	2 18.9 43 70 62	8, 99,0 8, 10 mg	0.01	20 00 000	2 0 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	8 20.9 46 86
YARN TEST HISTIAS.	Btzhbrite.	Product.  Counts Actual.  Work of Hupture (Inch-lb.)  Lycnness Class.  Lycnness Class.  Lycnness Class.  Lycnness Class.	20.4 110.2 2,332 4 4.2 17.2 81	8 127 0 2,475 4 1.2 19,2 82	8 2,190 81 1.7 13,4 81	5 3,2 15,3 80	6 2.2 17.5 89	1.2 13.4 90	1.5 17.4 01	15.2 86	17.2 88	18.9 87	6 17.2 85	,5 19,1 %	27.7	17.2 88	18.9 %	8, 99,6	0.01	20 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 2 2 2	20 00	8.00.9
Yaux Teal Hisdias,	Britis m.,	Product.  Counts Actual.  Troth of (Inch-1b)  Trother.  Trother.  Trother.  Trother.  Trother.  Trother.  Trother.	20.4 110.2 2,132 4 4,2 17.2	8 127 0 2,475 4 1,2 19,2	8 2,190 81 1.7 18,4	3,2 15.3	5 2.2 17.5	1.2 13.4	1.5 17.4	15.2	17.	18.9	6 17.2	1.01 5.	7.7	17.2	18.9	9,99	0 2	0 -	12.0	3 00	6.02
Yans Test Misuits,	B vizio ric.	Product.  Counts Actual.  Work of Hupture Hupture (Inch-lb.)  Product.  Product.  Product.	20.4 110.2 2,132 4 4,2 17,	8 127 0 2,475 4 1.2	8 2,100 81 1.7	3 3.2 15.	19	1.2	1,5	╀			1-2	•3	i -	<u> </u>		x   0			1		
-	Baries m.	Product. Counts Actual. Work of Rupture (inch-lb) Product. Product.	20.4 110.2 2,132 4 4	8 125 0 2475 4	8 2,190 81	÷	ei 	-		0:0	1,0	1:3			•	m	e)	20 0					
-	Baries m.	Product. Counts Actual. Washing Washing Washing Washing Washing	20.4 110.2 2,132	8 127 0 2,475	8 2,190			<b>.</b>	~	i			"	ei	3.0	-		· } ·	: -	• 6	1"		
-	   	Product. Counts Actual. Work of Rupture (Inch-lb.)	20.4 110.2 2,	8 125 0	50	1,900	98			-	4	-	60		5		<b>-</b>	٠.	• •	:	-	, -	
-	   	Product. Counts Actual	20.4 119.	12.7	1		वा	2,313	10012	2,800	851,2	9,18	<u></u>	3875	ei E2	2,104	3,137	85.5	600	28	2.581	503	1,367
-	   	Product.		20		118.6	110.1	186.0	128 8	177.3	120.3	90.0	E	103.6	80.8	123.2		2 E	108.9	7	120.8	101.0	0.50
-       		Count-Strength Product.		10.	13.1	16.1	16.8	2	10.0	16.8	50.5	1.7	19.5	91.0	30.0	0.	6	-   e	£.	30.5	8.0	21.1	31.3
	LEA.		1,630	1,671	9.32	223	2110	Ę	206	1,550	1,441	1,300	1,641	814,1	1,256	1,290			1,593	1,360	1,574	1,105	1,184
ŀ	:	( edi) digasid	81.8	31.	77.0	11.0	36.1	65.3	50,0	08.1	72.8	7.	6.0	1.50	9:	5.2 2.7			67.5	#.#	78.3	02.6	8.0 0.0
	j	Counts Actual	30.0	19.8	12.1	15.8	16.3	12.1	10.2	15.8	8.01	83	19.8	23.8	8.5	구 응	- ·		5.7	30.7	20.1	23.4	8 0.
	!	Turus por fuch.	17.98	20.23	13.02	15.97	18,10	13.92	17.98	15.97	17.05	19.73	17.08	10.73	27,77	16,98	25.02		10,73	91.80	17.08	10.73	91.86
ULARS.		Draft.	5.21	6.32	4.67	5.38	5.53	15,31	5.00	5.43	5.43	6.54	6.19	0.03	7.57	88 :	1 18 1	6.10	5.78	7.20	6.10	5.36	5 5
E PARTICULARS.	k.y.a	Spindle Speed, I	:	:	2,100	7,350	8,800	7,350	8,000	8,150	008'4	98,6	0,430	0,460	000,0	9,160	8,850	0,250	0,400	9,400	9,400	9,500	0,430
RING DAVE	paodg	Tront Roller R P M,	104	103	180	100	521	187	178	104	188	E	25	170	울		138	2	121	128	102	172	991
	ea De	Yarn Breahage 100 spindies hour,	8	0	01	¥	2	82	125	ŧ,	56	쯃	\$	29	22	8 :	3 \$	-	•	17	10	0	8
ES.		Total Loss.†	32.0	:	0.12	•		10.1	:	23.5	:		2) 6.	:	:	<u> </u>	:	17.0	:	:	25.0	:	:
WASTE PERCI WIAGES.		Splaning Loss.	61	:	0.7	:	:	9.6	:	0.4	:	:	0.0	:	: :	9.0	: :	0.3	:	:	0.0	:	:
ar bre	*83*	Card Room Los	9.6	:	8.7	:	:	10.0	:	9.7	:	:	10.0	:	:	20	:	8.5	:	:	11.2	:.	:
WW	.82	Blow Room Lo	13.6	٠	13.9	:	:	0.7	:	13,8	:	:	3,8	:	: ;	11.7	: :	9,1	:	:	15.1	:	:
-(-Ed	di) elq	imas to stals?//	91		6			2		ន			<b>=</b>		1	2 		2			2		
	۳	Counts Numba	20 A	20 B	12	10 A	163	13	2	2	ន	37	8 8	22	g :	ន :	1 8	ន្ត	캱	စ္က	20	ä	8
	Dato	Splaning.	6-2-30	7-2-30	14-3-31	10-3-31	16-3-31	10-5-32	18-6-32	3-1-33	3-1-33	2-1-33	#6-6-07	20-3-3	# P			9-3-30	10-3-30	10-3-36	5-4-37	1-4-37	3-4-37
		Scason.	1920-30	1020-30	1030-31	1030-31	1930-31	1931-32	1931-32	1032-33	1032-33	1032-33	1033-34	1033-31	1033-34	1934-30	1034-35	1935-30	1935-36	1935-36	1936-37	1936-37	1936-37
] <del></del>		Cotton,	Nunded .		:	:	:	:	:	:	:	寸	:	:	+		: :	<del> </del>	Nanded	-	:	:	Nanded
		No.	609 Nut				1		1							Z/12 Na		1	3111 Na	$\neg$			3547 Ne

• Diameter of ring frame front roller—I luch. Diameter of rings—14 inch.

† It is to be noted that the total loes is for a snall sample weighing 10 lbs. ; for bulk sample spun under nill conditions it would be less than shown here.

### 5.—LATUR COTTON.

These samples have been very kindly supplied by the East India Cotton Association inspection and approval by their Standards Committee, in accordance with an gement made with the Association to supply to the Technological Laboratory, for g, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Seuson.	Sample No.	Cotton.	Season.
1002	Latur	 1930-31.	2713	Latur	 1934-35.
1339	**	 1931-32.	3112	,,	 1935-36.
1726	,,	 1932-33.	3755	٠,	 1936-37.
2194	**	 1933-34.	4037	12	 1937-38,

### I. SPINNING TESTS.

### reatment :---

(b)

(a) Blow-room. —Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 onwards: —Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards: —Same as above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

oinning Master's Report:—

### (a) Cotton:—

					LAT	UR.			
-		1930-31.	1931-32.	1932-33.	1933-31.	1031-35.	1935-36.	1030-37.	1937-38.
••	••	Creamy-white.	Creamy	Dullish white to creamy- white.		White to crea- my-white; brightish.	White,	Creamy-white.	White.
19	••	Leafy; stained.	Very leafy (large size leaf); slightly stained.	Very leafy	Leafy; a little stained.	LCafy.	Very leafy; a little stained.	Very loaty.	Very leafy; an occasional stain.
		Soft silky.	••	Soft.	Good.	Good.	Good.	Fair.	Good.
bna	Nep-	Well-glaned.	Fairly well- ginned.	Well-ginned.	Fairly well- ginned.	Well-ginned.	Well-ginned.		••
	••	1.5%.	1.2%.	٠	••	••	•• .	Some seeds.	Few unginned 0.59%.
er	••		Almost clean.	Somewhat leafy.	Pairly clean.	Almost clean,	Clean.	Leafy	Leafy.
	••	Good.	Good.	Even, nep- free and shed much leaf.	Good.	Fairly good.	Even ; nep-tree.	Neppy	A little noppy.
f ten	flat	17.6 grams.	17.9 grams,	******	20.8 grams.	20.7 gram=.	13.7 gtama.	31.6 grams.	20.6 grams. •
••	••	••	••	Gaye a leafy up.	••	••	••		••

### (b) Yarn:—

					LAT	er.			
	•	1930-31,	1931-32.	1032-33.	1933-34.	1934-35,	1937-36.	1930-37.	1937-35.
3 	••	Clean. Even		Almost clean. Even.	Even in the two lower			A little leafy. I'airly even.	l'airly clean. Even in 16
,.	••	A little neppy.	Almost free of nep.	of nep.	עקסית!	-	allghtly neppy.	Neppy.	A little nepply.
	••	••		Shows an occa- sional slub.	•	Slightly slubby.			
		l	<u> </u>	·	<u> </u>	_	1		1

inning Test Details and Results:—See Table 5 on page 15.

II.—REPORT OF THE STANDARDS COMMITTEE FOR LATUR.

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						LATUR	un.			!
			1930-31.	1931.32.	1032-33.	1933-34.	1934-35.	1935-36,	1936-37.	1937-38.
Contract valued under	:	:	F. G. Broach No. 2	F. G. M. G. Broach No. 2.	F. G. Broach No. 2 F. G. M. G. Broach F. G. M. G. S. April, Moy No. 2. April/Moy No. 2. April/Moy No. 2. April/Moy 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1934 delivery.	F. G. M. G. Broach Hodge Contract No. 2, April/May 1935 delivory.	Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach Dontract Hodge Contract Hodge Contract No. 2, April/May No. 3, July/Aug. 1936 dolivery. 1936 dolivery.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1037 delivery.	F. G. M. G. Broach Hodge Contract No. 2, April/May 1938 delivory.
Class	:	:	Fully good.	Fully good to fine.	Fino.	Fully good.	Strict fine.	Fine.	Good to fully good.	Fully good to fine.
Colour	:	:	Dull creamy.	Considerably Bluish White.		Grey.	Greyish white.	Whiti-h.	Groyish white.	Dull white.
Staple Longth	:	;	Baroly 7/8 inch.	Full 7/8 inch.	7/8 inch.	7/8 inch.	27/32 inch.	7/8 inch.	13/16 inch.	3/4 inch.
Staple Strength	:	Good.		Fair.	Fair.	Good.	Good.	Good.	Moderate.	Weak.
Regularity	:	<u> </u>	Irregular.	Fairly 10gular.	Irregular.	Irrogular.	Rogular.	Irregular.	Irrogular.	Irregular.
Value above or below contract rate	t rate	<u> </u>	R. 15 off.	Rs. 30 on.	Rs. 12 on.	Rs. 20 on.	Rs. 55 on.	Rs. 30 on.	Rs. 5 off.	Rs. 10 on.
Bakis	:	<u> </u>	(Rs. 222)	R«. 175.	Settlomont rate of F. G. M. G. Broach Hedge Contract No. 2, April/May 1933 delivery Rs. 177.	F. G. M. G. Broach Hedge Contract No. 3, April/May 1934 delivery Rs. 202.	rate of R. G. M. G. Broach F. G. M. G. Broach I. Broach Hodge Contract Contract No. 3, April/May No. 3, April/May pril/May 1934, April/May 1935, Abril/May delivery Rs. 202. Achivory	Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach Contract Fodge Fod	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1937 dolivery Rs. 186.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1038 delivery Rs. 163.
Date of Valuation	:	:	5-3-31.	0-5-32.	25-3-33.	8-3-34.	26-3-35.	2-3-36.	0-8-37.	26-4-38.
Remarks	:	: 20	Slightly stainy and black leafy.	:	:		:	:	:	:

		۱.	ı	!	l			!			1			ļ			!			1		l		ı		ı
	ţī.	RELATIVE: IICMIDITY (%)	_	Testing Room	8	99	es ——	g	67	8	8	3	8	F-1	1	ı,	10	8	6	8	g	13	?! 	g	g	
	S	REI		Spinning Room.	8	70	ŧ	16	ŧ	3	15	10	녆	8	<u>بر</u>	5	8	3	6	15	8		Ę	8	63	
	69	Temper- Atore (°F).		Apluning Room.	Sign	18	જ	8	ä	66	£	'n	8.	12	. ž	93	3	5	83	G	9.	ž.	17,	16	16	
	ä			Turns per lach.	17.1	7.7	19.7	17.4	19.0	20.0	17.4	10.1	20.1	17.2	18.8	1.55	17.1	19.0	1 - 21 21	17.3	13.0	17.0	13,9	15.4	17.4	
	a			Neps per 5 and.	1.5	4.0	i:	1.5	0:	ei ei	1.5	1.8		91	ø,	e1 e1	1.0	ei O	1.8	1.5	1.5	3.5	13	0:0	e: e:	
	읡			Пусите» Нам.	15'	7	7	-	-	13	7	7	4		**	6	6	4	ıa.	7		7	12	",	7	
	13	31175.		Count-Work.	1112	0212	0818	=======================================	9776	03:5	2002	310	2110	2525	2510	2147	2075	1/16	2763	2112	61 52	0555	: 11:	1	2116	1000
ON.	ş	YARY TEST RESULTS	BALISTIC.	भाषास्य स्थान्य	199.9	97.9	61	121.0	1.00	::	145,4	162.4	103.2	12.1	106.0	÷	130.0	100.0	99.0	118.	1.90	121.0	D C.	169.0	118.8	and Hone it would be less than
FOR LATUR COTTON.	30	YARY		Counts Letted.	20.0	C:	5. 11	20.2	23.0	c.	20,00	21.1	1.	6.3	93.6	17.	20.0	21.6	6. 1.	80.9	# #1	30.1	2. 2.	16.5	20.3	10 tone (4)
UR (	ź			Count-Strength,	1402	19-0	1362	1311	121.	101	1585	1176	1335	1466	1 5 60	13¢	1620	1509	15-1	71	1124	1 1	10.11	1363	1216	mili con
EAL !	17		I.E.A.	(ज्याः वीभग्रजाट	69.4	53.3	 	67.53	1.19	s:	5.25	#.C#	13	2	09	:: <b>‡</b>	, è	9.79	2.0	63.3	- - - - -			53.5	8.09	100
FOF	16			.fauts. Actual)	2.03	8.7.3	** *!	1.03		93.0	19.8	0.7:	0.15	30.3	93.0	9.03	20.3	24.1	8 	÷	6.53	20.3	6.	16.3	20.2	annue .
RESULTS	12			Turns per Inch.	14.48	10.73	20.75	17.03	10.73	£0.73	17.98	19.73	20.72	17.93	19.73	23.11	17.95	10.73	23.26	17.9.	19.73	17.95	15.73	15.97	17.08	t. for luft
	11	Particelang.*		Draft,	6.33	0.70	6.53	0.31	0.0	50.	2,0,2	08.0	0.50	6.9	5.50	3.	5.05	2.5	7.03	Ş.	6.33	6.07	į.	5.03	0.0	of ring18 inch. weighing 10 lbs.: for bulk sample am
TEST	13		ж.	spinde Speed, It.I	0510	521.0	10500	9550	0000	0000	0076	9700	1000	9550	0216	0000	9600	9000	07.78	9350	9320	9600	0220	00-S	0056	ter of ring
	12	Игка ЕвлчЕ	'pə	Front Roller Spo R. P. M.	195	E	156	ţ	169	17.	3	171	181	193	176	110	19.	176	135	190	E	95	<del>;</del>	196	â	• Diameter of ring frame front roller—I fach. Diameter of 12 is to be noted that the total loss is for a small sample.
-SPINNING	11		per 19d	Yarn Breakages 100 spinndles hour,	0	ន	36	11	2	25	92	9,	100	12	95	8	0	갦	ij	55	#	92	Ş.	ę	20	er—I fach
	10	15.		f.eeo.I lateT	21.8	:	:	6.2	;	:	20.5	:	:	135.4	:	:	8.02	:	:	19.0	:	33,4	:	26.8	:	ont roll
Table 5.	o,	WASTE PERCENTAGES.		Splaning Loss.	0.5	:	:	0.0	:	:	0.6	:	:	0.0	;	:	0.0	:	;	0.3	:	0.1	:	0.3	:	rame fu
Tab	8	ne Per		Card Room Loss.	9.5	:	:	10.1	:	:	10.5	•:	;	12.3	:	:	11.0	٠;	:	9.2	:	20.1	:	12.1	:	of ring
	t-	WAS		aro.I idooff wolff	13.1	:	:	0,11	:	;	10.6	:	:	11.4	:	:	10.8	:	:	11.0	:	16.3	:	.10.1	<u>;</u> :	meter to be
	e	5	iqį 's	Iquing to state VV	2			10			97			10			e e			10		10		10	<u> </u>	• Dia
	z,			Counts Nominal.	8	17.	243	05	175	95	ន	24.5	0.40 0.40	ន	តាំ	8	នួ	ŧ,	ន	05	ă	ရ	ži	16	ន	
	#-		Date	of Spinning.	14-3-31	14-3-31	10-3-31	18-5-32	18-5-32	19-5-32	3-1-33	5-1-30 5-1-30	5-4-33	20-3-3#	#2-5-66	3-3-31	8-4-35	3-1-33	9-4-35	10-3-36	10-3-36	18-8-37	18-8-81	5-5-38	5-5-38	
٠			_	Scaron.	1920-31		1650-31	1931-32	1931-32 1	1931-32	1932-36	1939-33	1932-33	1933-34		1933-34	1031-35	1931-35	1931-35	1935-36	. 1935–36	-2: ibae-ar		193 <u>7</u> –38	1937-33	
			<del>-</del>		-;	:	:	-:	:	-:-		:	:	-:	:	;	-	:	:		÷	-	:	-	· i	ļ;·
	61,	 		Cotton	Latur.	Latur	Latur	Latur	Latur	Latur	1	Latur		Latur		Latur	Latur	Latur	Latur	Latur	Latur	Latur	Latur	Latur	Latur	 
	<b>H</b>			Sample No.	1003	1001	1002	1330	1:30		17.26	1726	1726	1616	1012	1015	2713	2713	2713	3113	3116	37.75	37.5	1001	1037	

• Diameter of the frame front roller—I lach. Diameter of tings—1g lach.

† It is to de noted that the total loss is for a small sample weighing 10 lds. ; for bulk sample spun under mill conditions it would be less than shown here.

### 6.-MUTTIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Schson.	Sample No.	Collon.	Place.	Season.
1000	Muttin	Bhavnagar	1930-31	2714	Muttin	Bhavnagar	1934-35
1337	,,	Botad	1931-32	3113	••	Amreli	1935-36
1885	,,	(londa)	1932-33	3546	••	Veraval	1936-37
2193	"	Bhavnagar	1933-34	4073	"	Bhavnagar	1937-38

I .- SPINNING TESTS.

### 1. I'realment :-

- (a) Blow-room.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once). Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.--Upto 1933-34 (inclusive):--Card, Drawing (2 heads), Slubber, Inter. Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 onwards: -Same as above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 1 2. Spinning Master's Report :- -

### (a) Collon: -

1				Mun	nv.			
-	10,0-31	1011 32.	1012-11,	ipla-41,	1001-31.	1035-36.	1034-37.	1937-98.
l olant ,	Dull creature white	Creany-white	Duilleh en amy- white.	White to	('remnenhite; dulish.	White to eriams- white,	White to crea- my-white.	White t cream) white.
Heatines .	statued vers leafs	ro in e w h a t stained; very leafyand- like leaf	ianh	Statuent: Ners Pars.	s Stalund; very buly,	stained; very leafy.	Very leafy	Very leafy; little status
let , ,	Poor	•	Softlish	Rough	Roughth	samewhat 10ftl-h.	Fairly good	itouzhish,
Chains and Sep- piness			:		Somewhat knotted.	Fairly well- gianed.	! !	Well-glaned
Seed- ,	0.75% reeds	1.4% ginned and ungin- nrd.	1.5% unsinued.	Contains Mans 11 n g i n h e d seeds.		**	Contains some ginned and unglaned and dust.	1
Card bliver	Tairly clean	mean	Clean	Almost clean	Almost clean	Almost clean	Tairly clean	Fairly clean.
Card Web	Good	Good	Good	Fairly good	l'airly good	Good	A tride neppy.	Good; quite-ir of neps,
Weight of 10 flat strips.	12.5 grams	13 5 grams	21.9 grams	10.0 grams	18. i grams	13.8 grams	18.3 grams	14.8 grams,
	ter) πasti	1	Ī	••		1	Abnormally wasty in the blow-room.	
(b) Ya	rn .—			Мотт	ïA,			ir
	1030-31.	1031-32.	1932-33.	1933-94,	1934-35.	1035-36,	1936-37,	1037-38.
Lleanliness	i	1			Almost cican	tiean .	Fairly clean	Clean.
Evenness	oven.	unovou.	Fairly oven in the lower	•	Eren	•	Faltly even	
Keppinees	Fairly nep-free,	Practically free	Count.	Nep-tree	l'ree of nep	Almost nep-free	Free of nen	Free of non
Slubbiness		of nep. Fairly alubby.		l	A izifie slubby	11	i	1
Remarks	l		1	1		l. "	••	**

<sup>3.</sup> Spinning Test Details and Results : - See Table 6 on page 18.

# II.—REPORT OF THE STANDARDS COMMITTEE FOR MUTTIA.

		*		,.	~			Muteia.	1	-	, , , , , , , , , , , , , , , , , , ,	
.1,	··. · · ,		1930	1930-31.	1031-32.		1932-33.	1933-34.	1031-36.	1935-36.	1036-37.	1937-38.
Contract valued under	dor	:	Fine Oomra No. 3.	)	F. G. M. G. I.	3roach	F. G. M. G. Broach Fine M. G. Oomral No. 2. No. 3 Dec./Jan. 1934 delivery.	Fine M. G. Oomra Fine M. G. Oomra Fine M. G. Oomra Hedge Contract Hedge Contract No. 3 May 1935 No. 3 March 1936 delivery.	Fine M. G. Oomra Hedge Contract No. 3 May 1935 delivery.	Fine M. G. Comra Hedge Contruct No. 3 March 1936 delivery.	Fine M. G. Oomra H. C. No. 3.	Fine M. G. Oomra H. C. No. 3. Hr. C. No. 3 May 1938 delivery.
Class	:	:		d to fine	Fully good to fine Fully good to fine Superfine	fino	:	Fine to superflue   Fine to superfine   Strict Fine	Fine to superfine		Fully good	Superfine.
Colour	:	:	Dull	:	Brownish ; some Whitish what stained.	some-	:	. Whitish	Browny-white	Whitish dull	Dull grey	Creamy-white.
Staple Length	:	:	] inch	:	t inch	- :	i inch	inch	Hom	I inch	Ta inch	; inch.
Staple Strength	:	:	Fair	:	Wenk	<del></del> :	Fair	Good	Good	Fair	Fair	Fair.
Regularity	:	:	Regular	:	Irregular	:	Regular	Regular	Bair	Regular	Regular	Fair.
Value above or below contract rate	w contra	ct rate	Rs. 5 off	:	Rs. 20 off	•	Rs. 10 off	Rs. 10 off	Rs. 10 off	Re. 7 off	Rs. 25 off	Rs. 15 off.
Basis	:	:	Rs. 188	: :	Rs. 175	•	Fine M. G. Oomra No. 3 Dec./Jan. 1934 dely. Rs. 199.	Fine M. G. Domrs H. C. No. 3 March 1931 dely. Rs. 176.	Fine M. G. Oomra H. C. No. 3 May delivery Re. 198.	Fine M. G. Oomra Fine M. G. Oomra Fine M. G. Oomra H. G. No. 3 May Hedge Contract H. C. No. 3 March delivery Rs. 198. No. 3 March delivery Rs. 231. Rs. 142.	Fino M. G. Oomra H.C. No. 3 March delivery Rs. 234.	Fine M. G. Oomra H. C. No. 3 May 1938 delivery Rs. 142.
Date of Valuation	:	:	5-3-31	:	9-5-32	•	26-7-33	+8.5.3	26-3-35	2-3-36	16.3-37	10.5-38.
Remarks	: ,	<b>'</b> :		:			:	:	:	:	:	:
			_		_							

÷;·•

			_														,			,						1
	72	Relative Humidity (%).	Testing Room.	5 8 3	8	8	69	8	8	8	ة ت	8	8	8	<b>89</b>	7	8	5	۲ 	1	; {	8	٤	; ;	Ę	_
	26	HUY HUY (%)	Spinning Room.	5 2 3	S	20	9	2	ï	61	8	69	8	†0	5	5	ತ	99	99	٤	8	6	g	9	8	
	8	TENFER- ATURE (*F),	Splnning Room.	C	8	8	8	88	17	98	2	18	*	eg G	83	83	88	87	88	8	3 12		ē	: 5	10	
ļ ·	15		rioni ver incli Actual.	12.0	13 60	14 0	16 5	0 51	13 1	14.0	19.3	13.7	14.5	12.0	13.4	14.0	15.0	13.4	14.1	1.01	5	1 5	10.6	11.8	12.0	7
	23		Zeps per 3 ard.	01 1- 12	2.1	e1	1.0	0.6	0.0	0.5	0.5	0.8	0.0	0.5	8.0	0.5	1.0	67	1.0	9	6	1.0	2.6	9.0	8.0	
			Evenness Class.	8 10 15	-	4	ıs	-	-	12	-	~	<b>.</b>	es	7	-	63	+	4	-	4	-	91	n		-
	ដ	'LES	Count-Work Product.	1806 1830	101	2110	2070	2084	2116	2192	2010	2038	133	2385	2435	93 86 87	2155	1000	9130	1300	1028	2342	2301	7	2342	
COLTON	30	Yan Test Re-ulf9	If n p t n t o t l l l l l l l l l l l l l l l l l	220 0 135.2 135 0	185.0	180.8	141.1	214.8	211.0	174.0	0.202	168.1	174.0	231.0		9 100	200.2	182.8	900 B	138.4	194.1	196.8	291.0	0.000	920.0	-
	19	Y vry 7	Counts Actual	13.8	10.3	11.3	14.4	9.7	10.0	13.0	10.1		13.2	10.3	61	11.9	10.3	12.4	13.1	8	11.8	11.0	61.0	10.3	10.2	7
MUTTIA	138		Count-Strength Product	1100 755 083	650	510	208	732	880	736	79.4	654	703	1111	924	131	802	080	830	520	188	2101	818	208	1070	1
	12		? (soll) alignants	119 2 54.3 68 3	0.50	80.3	58.9	75.5	89.0	8.03	71.7	55. 1	90.1		8	 2	87.7	55.1	1.00	1.59	75.4	85.1	0.80	78.2	105.0	
FOR	97		Counts Actual	13.9	0 01	11.4	11.0	0.7	10.0	12.3	10.1	11.8	12.0	10.2	12.0	11.0	10.9	10.0	12.6	10.2	12.2	19.3	8,3	10,2	10.1	
RESULTS	я		Turns per inch.	12.03 14.08 10.85	12.03	14.08	16.85	12,03	13 58	11.08	19, 63	13.03	14.08	12.63	13.02	14.08	12.03	13.02	14.03	51.63	13.05	14,08	:	15.11	13.58	
RES	13	•'suv Inc	Dialt	5.01	5.55	5 43	20 0	2 37	3.50	02 13	5.57	5.08	5.81	5.34	2.48	6.3	2	5, 43	6.43	6.00	5.43	5.5	8		5.43	]
TEST	13	O Thank Perious ins	gbunile Speed,	6990 7500 8750	080	2700	8300	0400	7550	1550	0400	6700	7500	0020	0000	20gr	0000	0020	7450	7000	7200	7700	0800	9000	7300	
U	13	RIVO I'RA	Pront Roller Speed, R P N	1071	107	100	176	183	200	187	180	123	189	183	180	T&T	100	180	184	708	160	107	1	103	808	
Table 6—SPINNIN	11		Yarn Breskages per 100 spindles per hour,	0 27 25 25 25 25 25 25 25 25 25 25 25 25 25	118	80	164	127	\$1 80	575	98	87	80	18	0	9	•	ei ei	•	18	15	킭	•	, c	• •	
<u>                                   </u>	10	. E.	† eac.l lascT	55.0	26.7	:	:	2.5	:	:	27.7	;	:	24.7	:	:	25.6	:	:	31.2	:	:	8	1	: :	]
le 6.	•	WASTR PERCENTIGES.	saci galanig	9: :	0.8	:	:	19		:	0.5	;	:	9.3	:	$\overline{:}$	61.0	:	:	6.0	:	:	1	;	: :	
Tab)	ø	F.	Card Room Loss.	127	0,	:	:	15.9	:	:	æ ei	:	:	10 4	:	:	9.3	:	:	11.8	:	:	9	3	::	1
ļ, -	^	WAS	Dlow Room Loss.	7: : :	18.3	:	:	13.3	:	:	16.6	:	:	15.8	:	:	17.8	:	:	21.7	:	:	1		: :	-
	φ	1_"	Welght of Sample, Ibs	. 2	10			2	-		22			10			01			a			۶	;		
	15		Counts Nominal.	2 4 8	101	121	140	10.1	103	123	104	설	123	TOT	٠ ١		10A	뙲	120	10.4	12A	121	a	90	Ę,	
)	¥		Date of Spinning.	12-3-31 12-0-31 13-3-31	14-5-32	10-5-32	16-5-33	20-9-33	20-8-33	20-8-33	20-0-34		20-3-34					_	19-3-30	6-4-37	_	0-4-37	97. K. 28			
	n		Sereon.	1030-31 1930-31	1031-32	1031-32	1031-32	1932-33	1032-33	1032-33	1033-34	1033-34	1033-34	1034-35	1034-35	1031-33	1935-30	1035-36	1035-36	1036-37	1030-37	1030-37	1037_28	1937-38	1037-38	
	63		Cotton.	Mattie Nuttie Muttie	Mutth	:	Ruttla	Mattla	Muttla	Muttla		:	Muttle	:	:	Muttin	:	:	Muttia	Muttla	Muttla	Mutth	<u> </u>	: :		
	**		Pample No.	1000 1000 1000 1000	1337 38		1337 M	1885	1885 M	1885 MI	1		2103		2714 Min	1			3113 Mu			3546 Mu	4073 350			

• Tho ring frame front roller diameter—!'. Diameter of rings—11."

† It is to be noted that the total loss is for a small sample weighing IO lbs.; for bulk sample spun under mill conditions it would be less than a hown here.

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### 7.—PUNJAB-AMERICAN COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
1352	Punjab-American	Khanewal	1931-32
1882	,,	Burewala	1932-33
2237	,,	Khanewal	1933-34
2732	**	Chinchwatni	1934-35
3114	,,	Phularwan	1935-36
3566	,,	Khanpur	1936-37
3938	**	Mian Channu	1937-38

### 1. SPINNING TESTS.

### 1. Treatment:

(a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Seutcher (3 times).

(b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:—

						Punjad-Averican	•		
	_		1931-32,	1932-33.	1933-34.	1031-35.	1035-36.	1030-37,	1937-38.
Colour			Creamy-white.	White to creamy- white.	White to creamy- white; bright.	White to creamy- white.	White to creamy- white; bright.	Creamy-white to white.	White.
Cleanliness	••		Leafy; stained noticeably.	Somewhat leafy.	A little leafy.	Stained; fairly leafy.	A little leafy.	l'airly clean.	Fairly clean.
Гeel		٠.	Softish.	Good.	Smooth good.	Good.	Good smooth.	Good.	Good.
Ginning and	neppli	lers	Fairly well-gin- ned.	Well-ginned.	Well-glaned but a trillo knot- ted.		Well-gianed.	Well-ginned.	Well-ginned.
Seeds		••	1.1% unglaned.	••					Somo undevelop ed.
Card Sliver			A little leafy.	Almost clean.	Clean.	Clean.	Clean.		Clean.
Card Web	••	••	Somewhat neppy.	Good.	A little neppy.	Good.	Gnod.	Good ; nep-frit.	Good; almos nep-free.
Weight of 10	flat st	rips	21.6 grams.	25.5 grams.	21.5 grams.	24.5 grams.	13,7 grams,	17. 4 grams.	19.1 grams,
Remarks							! } ••	••	

### (b) Yurn :--

	•	,;	-			Punjab-American	•		
	٠,		1031-32.	1032-33.	1033-34.	1931-35.	1035-30.	1030-37.	1937-38.
Cleanliness	••		l'airly clean. 🤌	Clean.	Clean.	Almost elenn.	Clenn.	Slightly leafy,	Almost clean.
Drenness	••	••	Somewhat uneven	l'aitly even.	Even in the two lower counts.	Pairly even.	Even.	l'alrly even.	Fairly even.
Neppines		.,	A little neppy.	Practically free of nep.	Free of nep.	A little neppy.	Almost nep-free.	Almost free of nep.	Fairly free of nep.
Slubbiness	•••		Slabby.	A triffe slubby.	••	Somewhat slubby.			

<sup>3.</sup> Spinning Test Details and Results :- See Table 7 on page 21.

II.—REPORT OF THE STANDARDS COMMITTEE FOR PUNJAB-AMERICAN.

					Ponjab-Aumican.			
		1031–32.	1932-33.	1933-31.	1931–35.	1035-36.	1936-37.	1937. 34.
Contract valued under	:	F.G.M.G. Bronch No. 2 F.G.M.G. B ro No. 2, July 1033 dolivery.	F.G.M.G. Broach No. 2, July/Aug. 1933 delivery.	F.G.M.G. Bronch Hedgo Contract No. 2, Apr./May 1934.	Broach F.G.M.G. Broach F.G.M.G. Broach F.G.M.G. July/Aug. Hedge Contract No. 2, Hedge Contract No. 2, Apr./May 1936 Apr./May delivery.	F.G.M.G. Bronch F.G.M.G. Hodge Contract No. 2, Hodge Co Apr./May 1939	F.C.M.C. Bronch F.G.M.C. Hedge Contract No. 2. Hedge Co	F.G.M.G. Bronch F.G.M.C. Bronch Hedge Contract No. 2. Hedge Contract No. 2.
C'In-4	:	About Fully Good Fine	:	Fine to Superfine	Superfino	:	Superfine	Burely fine.
Colour		Dull-white	Creamy-white	Greyish-white	White	Creamy-white	White, very alightly creamy.	slightly Dull white.
Staple Length	;	3/4 inch	3/4 inch	Baroly 3/4 meli	9/16 to 3/4 meh	13/16 inch	(c)	11/16 inch.
Staple Strength	:	Good	Fair	Good	Poor	Good	Guod	Fair.
Regulanty		. Somowhat irregular Irregular	:	Irregular	Very irregular	Regular	Regular	Slightly irregular.
Value above or below contract rate	:	Rs. 10 on	Rs. 10 on	Rs. 15 on	Rs. 10 on	R4. 25 on	Rs. 15 on	Вн. 1й оп.
Basis	:	Rs. 161	F.G.M.G. Bronch! No. 2, July/Aug. 1933 dolivery, Rs. 207.	oach F.G.M.G. Broach y/Aug. Hodge Contract No. 2, olivery. Apr./May. 1934 delivery Rs. 197.	F.G.M.G. Broach F.G.M.G. Broach F.G.M.G. Hodge Contract No. 2, Hedge Contract No. 2, Hedge Co Apr./May 1934 Apr./May delivery Re. 1935 Apr./Ml	F.G.M.G. Broach F.G.M.G. April. Modgo Contract No. 2, Hodgo Co Apr./May 1034 April. Modelivory Rs. 180.	F.G.M.C. Broach F.G.M.C. Hodge Contract No. 2, Hedge Contract No. 2, April/May 1837 April/May delivory Rs. 260.	F.G.M.G. Broach Hedge Contract No. 2. April/May delivery, Ms. 172.
Dute of Valuation	;	30-5-32	26-7-33	9~1-31	15-4-35	2-3-36	5-1-37	2-3-38
Remarks	:	:	:	:	:	:	:	:

Table 7.—SPINNING TEST RESULTS FOR PUNJAB-AMERICAN COTTON.

27	E (%)	(w)	Textug Room.	63	6	02	02	80	89	89	۶	67	99	8	20	61 [~	83	20	80	ន	8	69	
98 	RELATIVE (%)	HOWEINER	Sphulng Room.	.5 —	88		B	99	2	6	ş	55	6	8	8	짇	SS SS	نا	57	63	\$	 6	
33	TENTER-		spinning Room,	16	દ	ç	37	25	87	18	8	S	8	22	ş	\$1 20	8	- 6e	£	æ	헕	<del>5</del>	
7.	-	'	Turns per inch. Lectual.	15.5	17.1	15.4	17.0	15.3	17.4	19.8	13.1	15.1	16.9	15.5	17.5	19.0	15.1	17.1	10.0	15.1	17.5	18.6	
ន			Nops per yard.	ci ci	9.0	1.2	1.6	8.0	9.0	1.0	0.1		1.0	1.0	1.0	6:	1.9	1.0	÷:	1.0	1.0	5:	
31			Evenness chass.	_	1.3	7	17	-	, 	¢	-		-	65	**	4		**		e	*	-	
13	rs.	•	Count-Work Product.	2857	2283	2035	8155	2074	9738	2450	2367	1028	2102	3261	2818	27.53	3342	3000	2740	2018	2316	2432	
ä	Test Results	Dallistic.	Work of Rupture (inch-ibs.)	182.0	112. 1	170.0	112.0	188.2	140.1	99.6	101.0	122.8	127.0	304.0	141.6	115.6	207 0	148.1	126.6	163.0	110.1	61.0	
t)	XARN TE		Counts Actual.	15.7	4.05 4.05	15.5	10.8	15.8	10.5	9.47	19.2	15.7	16.5	16.0	10.0	9.6	10.1	20.5	3	16.0	10.0	19.9	
18			Count-Strength Product.	1308	1018	786	91	1371	1353	12.13	6.	700	700	1644	1526	1403	1487	1410	1271	1373	1250	021T	
12		LEV.	Strength (lbs.)	89.8	51.9	63.1	37.8	85.7	70.1	- - -	10.8	38.0	£5.8	109.1	76.:	8. 8.	2.7	20.02	85 61	8.3	61.9	21	
16			Counts Actual.	15.8	8: ::	15.8	1.03	16.1	19 3	2	13.1	15.6	16.8	10.1	8. c.		16.4	÷.	6.50	16.1	51. 61.	8. 6.	
15			Turns per inch.	15.97	17 98	15.97	17.03	15.07	17.99	30.71	13.02	15.07	17.08	15.97	17.09	10.73	15.07	17.08	19.73	15.97	17.08	10.26	\   !
11	CULARS.*		Draft.	5.10	6.34	3.11	3	33	5.10		- 36.	5.51	5	13.	5.3	6.31	15.15	5.00	. e.	1.3	5.93	6.03	1
22	TRANCE PARTICULARS.	٦٢.	.4.1 dongs albuigs	*\$50	0500	0008	8100	8700	9200	9200	6500	1100	8700	8630	9330	0000	8330	0200	9200	8630	9500	10200	
13	RING PRA	'n	Front Roller Spec	100	180	180	170	103	188	170	171	091	176	261	81	171	1 5	101	8	202	103	108	
11		-3110	Yarn Breakages per to	16	105	213	ही	ē.	13	GS GS	P.	ភ	ı Ş	6	2	17	13	22	23	21	55	ķ	
10	ES.	Ī	f.ero.l latoT	89.3	:	5.12	:	17.0	:	:	10.1	:	:	18.0	:	:	18.1	:	:	19.0	:	:	
0	WASTR PERCENTIOES.		.eeo.I gaintlig	0.0	:	0.5	;	0.6	:	:	5.5	:	:	0.3	:	:	6	:	:	0.0	:	:	
8	TR PER	_	Card Room Loss,	11.5	:	13.5	:	10.7		:	11.8	:	:	10.0	:	:	: و	:	:	=	:	:	
1-	ST.M	-	.efo.l moon wold	11.7	:	8.8	:	5.7	: :	:	8.		:	8.0	:	:	8	:	:	1.0	:	:	
æ		.94	Welght of Sample, Il	ន		2		92	ľ		2			92			92	}		10			
ıs			Counts Noutinel.	101	1967	161	20.1	1	106	976	티	16.1	163	161	20.1	116	164	20.1	25.1	16.1	1.02	105 1013	
**	-		Date of Spinuing.	0-0-32	7-6-32	18-8-33	19-8-33	10-1-34	18-1-31	18-4-34	12-6-35	5-6-35	1-0-35	12-3-30	12-3-36	12-3-30	11.1	11-4-37	15-4-37	8-9-38	9-2-38	9-2-38	
n	_		Sen con.	1031-32	1931-32	1039-33	1932-33	18:131	10.13-34	1033-34	28.1891	1031-35	1934-35	1972-30	1075-36	1935-36	1906-37	1030-37	1930-37	1907-38	1937-38	1937-39	
el	-		Cotton.	Punjab/			Unerican.	i	American.			American		1	American.		1	ican,	: :	n n fa b/	American.		
	-	-	Sample No.	1852 1		di cast		- Little		1283	e di i		1,133	1112		3114	4 8952		3266	g. 2808		3035	

• Diameter of ring frame front roller—I'. Diameter of rings—11".

It is to be noted that the total less is for a small sample weighing 10 lbs, or thereat out; for bulk sample spun under mill conditions it would be had than shown here, The performance of the 1934-33 sample 19 much below the average for this cotton.

### 8.—BROACH COTTON.

These samples have been very kindly supplied by the East India Cotton Associaafter inspection and approval by their Standards Committee, in accordance with an agement made with the Association to supply to the Technological Laboratory, for ag, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
1351	Broach	Miyagam	1931-32.
1782	,,	Dabhoi	1932–33.
2235	"	Palej	1933–34.
2731	"	Broach	1934–35.
3263	"	Palej	1935–36.
3542	"	Amod	1936-37.
3543	,,	Palej	1936-37.
4060	,,	Broach	1937–38.

### I. SPINNING TESTS.

### l'reatment :---

- (a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### Spinning Master's Report:—

### (a) Cotton:—

						Brot	CH.			
_	-							193	10-37.	1
			1931-32.	1932-33	1933-34.	1934-35	1935-30.	Amod.	Palej.	1937-39.
		••	White to crea- my-white; brightish.	Creamy -white; bright.	White to crea- my-white; bright.	White; bright-	White to crea- my-white.	White.	White to crea- mv-white; bright,	White to crea- my-white.
たちち .	• •	••	l'airly clean.	Clean.	Clean.	Fairly clean.	l'airly clean.	Fairly clean; a	Clean.	Fairly clean
	 1 Ne	nni.	Good-bodied.	Good.	Smooth and bodied.	Good.	Softish.	tritie stained Good bodied.	Softish.	Fairly good.
		hbte	Well-ginned,	Well-ginned	Well-glaned.	Well-ginned.	Well-ginned.	Well-glased.	Well-glaned.	Well-ginned.
		••	1% unginned	2.2% ungin-	<b>!</b>		} . <b>.</b>			A few unginned.
lver.	• •		Almost clean.	ned. Clean	Clean,	Almost clean.	Clean	A little leafy.	Clean.	Fairly clean.
eb of	ten	 flat	Good.	Even and nep- free.	Good	Good	Good.	Almost nep- free.	Good.	Good; free of nep.
	··	HAL	16.2 grams.	15.4 grams.	16.9 grams.	21.9 grams	18.8 grams.	19.4 grams.	14.0 grams.	15.7 grams.
.3	••	••	<b></b>		·					••
_					<del>'</del>					

### (b) Yarn:—

					Broa	CH.			
		1931-32.	1932-33	1020.04	1	1	103	6-37	1937-35.
		1	1	1933-34.	1934-35.	1935-36.	Amou.	Palej	1007-03.
ness		Clean.	Clean.	Tairly clean.	Almost clean	A little leafy.	Fairly clean.	Slightly leafy.	A little leafy.
ءه شد	••	Even	Even.	Fairly even	Even,	Fairly even.	Even.	Fairly even.	Even.
1053	••	A triffe neppy.	Free of nep	Almost free of	A little neppy.	Almost free of			Almost free of
ness	••	·•	1	nep.	A little slubby.	nep Slightly alubby	nep.	nep.	nep.

Spinning Test Details and Results: - See Table 8 on page 24.

II.—REPORT OF THE STANDARDS COMMITTEE FOR BROACH COTTON.

					Вполси	\си.			
		60 1001	00 0001	0 000	20.000	20 2001	1930	1936-37.	
		1931-32.	1932-33.	1953-5 F.	1954-50.	1930-30.	Amod.	Paloj.	1037-38.
Contract valued under	:	F. G. M. G. Broach F. G. M. G. M	F. G. M. G. Broach No. 2 April/May 1933.	F. G. M. G. Broach Fedgo Contract No. 2 April/May 1934.	F. G. M. G. Broach F Hedgo Contract No. 2 April/May 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2 July/Aug. 1936 delivory.	F. G. M. G. Broach. No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach Hedge Contract No. 2 April/May 1938 delivery.
Class	:	Strict fine.	Fine to Superfine.	Superfine to Extra Fine. Superfine.		Fine.	Fine.	Superfine.	Fine.
Colour	:	White.	White but slightly White.		White.	Creamy-white.	White.	White.	Slightly creamy.
Staple Length	:	5/8 inch.	3/4 inch.	3,4 inch.	11/16 inch to 3,4 in. 5/8 inch.		3/4 inch.	11/16 inch.	11/16 inch.
Staple Strength	:	Good.	Good.	Fair.	Fair.	Fair.	Moderate.	Moderate.	Fair.
Regularity	:	Regular.	Rogular.	Regular.	Fair.	Rogular.	Rogular.	Rogular.	Fair.
Value above or below contract rate	:	Rs. 2 on.	Rs. 8 on.	Rs. 12 on.	Rs. 7 on.	Rs. 3 on.	Rs. 3 on.	Rs. 3 on.	Rs. 4 on.
Basis	:	Rs. 164.	F. G. M. G. Broach F. G. M. G. M. G. Broach F. G. M.	F. G. M. G. Broach I Hedge Contract No. 2 April/May 1934 dely. Rs. 197.	F. G. M. G. Broach Hedge Contract No. 2 April/May 1935 delivery Rs. 237.	F. G. M. G. Broach Hedge Contract No. 2 July/Aug. 1936 delivory Rs. 223.	F. G. M. G. Broach F. Hodge Contract No. 2 April/May dolivery Rs. 246.	F. G. M. G. Bronch Hedgo Contract No. 2 April/May delivery Rs. 246.	F. G. M. G. Broach Hedgo Conkract No. 2 April/May 1938 delivery Rs. 159.
Date of Valuation	:	30-5-32.	24.5-33.	9-4-34.	15-4-35.	24-6-36.	16-3-37.	16-3-37.	10.5-38.
Remarks	:	:	:	:	:	•	:	:	:

	,   <u></u>	اید	Teeling Boom	2	8 8	2	) E	8	63	2	: :5	99	2	31	25	3	훙	3	150	3	£	1	;	S 8	
	11 [ (11)	HUMIDITY (",)		-		<del> </del> -		-		<del> </del>			-	-		00	:2		g			1		3 2	-
,	_		arcoll galaniqe	E		18	- 6	ě		8	0.7	6	-	1.	1-		_		1 0	_	-	1	_	, e 	_
à	TI VIII	ĘĘ.	moosi kalangk	2	8	, g	8	Ę	ş	7	£	ž	15	13	2	æ	2	9	3	<b>%</b>	\$ 	J a	; ;	ਤ ਰ 	
ē		'	สอด 199 <i>2011</i> โดยว่า.	13.3	15 a	13.4	15 5	13.3	18 1	13.4	15.1	1 11	13.5	15.1	17.3	13.1	14.4	17.4	13.5	11.7	15.4	5	14.4	15.4	
5	•	1	Neps per 3 and	13	61	1.0	15	10	1.0	1.5	1.0	61	51	8.0	1.0	8.0	8.0	1.0	1.0		1.5	19	12	0.8	
÷		-	E1 enuirs ( 12-8	-	47	-		-	-	.,	es		-	7	rc.	**	ກ	4	٦	4	13	6.			•
5	1174.	_	AroW-Jano!) 1 mbor¶	1000	2071	9102	2772	:543	2900	2528	2022	2620	1168	20.37	7107	7072	2703	13 201	2747	2304	5010	9110	5503	2,700	
	the Test lirelity	ulibric.	Nork of Ruptur (tuch-lb)	911 0	120 8	207.0	155 0	216 0	137.2	207.2	156.4	158.8	101.2	130.0	133.0	231 0	180 0	117.8	205.1	177.8	130.4	3.618	8 821	156.9	1
_		=. 	Counts Actual	12 3 E 21	10.2	12.0	<b>†</b> 91	21 21	<b>1</b> 91	21	18 O	10.5	2	15 0	10.2	1.21	11.3	16.0	i i	13,8	16.1	19.0	0 71	10.0	
DKOACH 17 18	'	1	Count >17. ugth Product	13,	020	1200	1143	1923	1801	ž	930	1166	946	68%	1167	1390	1980	1166	1000	70	7	101	1063	700	
12 T		11	Strength (lb4)	92.5	57.0	90.3	0.17	1.00	68.3	0 00	4.75	0.0	x x	53.1	() ()	110.5	5 2	<u>د</u> د	٠ ٤	7.	51.0	81	76.5	55.8	
7 2 2 3		•	Counts Actual	61	10.0	19.7	15.0	12.3	16.3	1 21	10.2	10.0	12.0	15.9	16.1	11.9	13.9	;; =		13 \$	13.1	21	13.0	5 5 7	
12.5			form tog same.	13.02	15.97	13.92	15 07	13 92	15,87	13.02	13.07	17.98	13.02	15.97	17.0%	13.92	14.93	15.07	13.02	14.98	15.07	13 93	14.9%	13.07	1
=	Partice and	,	neatt (	1.13	5.35	5.00	j.31	1.90	15.21	5,13	5.76	08.2	10.0	5.67	5.78	5.20	5.21	2°.03	6.20	5.21	7	5	5,83	0.10	
ء 1	ur Parri	, n	spindle speed, It P.	1400	0008	7800	1300	7000	0507	200	7007	0000	7450	0003	9200	7600	2002	8650	7700	8450	0.07	8,200	007	200	ļ
1 2	ART BATH		Front Roller spec	601	240	Ş	111	ą	081	£.	174	*	191	9	10.2	900	505	eg T	85	707	190	215	101	100	
11 11 01		_	Yarn Bicalages p 100 spandles p hour,	ş	ε	ï	ដ	t-	Ŧ	ş	12	<b>3</b>	g	16	23	12	t-	9	=	ei ei	ž		ęį		
ב ק	2	<del></del>	Total Lose †	15.6		10 0	;	10.0	:	7.7		:	0.71			14,5	:	:	± ±	:		15.9	:	:	
סיים פיים	RC) \ T \ C3 4	-	>plumbs Los-	8.0	:	=	•	0.5	:	8.0	:	:	13.	:	:		:	:	.5.	:	:	7	:	:	
, aoic	E	_	Card Room Lass	8.8	:	8.0	:	10.0	:	11.3	:	:.,	10.2	:	:	8.5		:	0.0	:	:	0.0	:	<u>:</u>	l
1-	Were	-	Blow Room Love.	0.0		3.5	:	6.0	:	8	:	:	61	:	:	6,3	:	:	0.9	:	:	5	:	<u>:</u>	١
æ		,edi	Weight of Sample,	9		2		01		2	_		ē	•		2		-	2			2	<u> </u>	_	ŀ
٠,٥			Connts Northerl	21	10.1	ij	10.1	61	16.1	2	10.1	163	22	191	<u>5</u>	21	= .	10.1	ဌ,	=	10A	<u></u>	Ξ	10A	1
-			Date of spinning	7-0-32	0-0-37	29-5-33	29-7-33	16-4-31	17-4-34	. <del>1</del>	4-0-35	4-6-33	0-7-30	0-1-30	1-7-36	27-3-37	23-2-37	27-3-37	27-3-37	21-3-37	27-3-37	20-5-38	21-2-12 21-2-33	20-5-33	
ef			, ye 140M.	1031-32	1031-37	1072-33	1012-33	1037-34	10.13-34	1031-35	1031-37	1931-35	1037-36	1035-36	1935-36			19.36-97			1030-37	1037-33		1037-38	
<b>-</b> 1	-		Cotton.	<u>-</u> -	•	  -	<del>-</del>	:	:	-	:	:	:	:	+ 1							<del>-</del> :	:	$\exists$	
4,	-		<del></del>	Breach	Broatl	Broach	Broach	Bruch	Bronch	Broach	Broach	Smarh	Broach	Br veh	Broach	Broach	(Smod)		llm ich	- Galei).		Broach	Broach	Broach	
-			7.11B)&	17.1	ICEI	2	17.5	22.15	12. 12.	2731	27.33	27.31	1.02.	3263	, 150°	2	<u> </u>	24 1	85/3	3	52	4000	<b>1007</b>	994	

Table 8.—SPINNING TEST RESULTS FOR BROACH COTTON.

Wanneter of ting france front roller—f. Diameter of rings—14".
 It is to be noted that the total loss is for a small sample wighing 10 lbs.; for hall sample span under nill conditions it would be fers than shown here.

### 9.—JAGADIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
1047	Jagadia.	Jagadia.	1930-31.
1355	"	**	1931-32.
1786	,•	**	1932-33.
2296	"	,,	1933-34.
2733	"	"	1934-35.
3262	"	"	1935-36.
3544	"	,,	1936-37.
4255	,,	,,	1937-38.

I.—Spinning Tests.

### 1. Treatment :--

- (a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover, and spun from single hank roving on Ring Frame No. 1.
  - 1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report:

### (a) Cotton:—

				JAGADIA.														
	-		1930-31.	1931-32.	1032-33,	1033-34.	1931-35.	1035-30.	1936-37,	1037-38.								
Colour	••	••	White to creamy- white; bright,		White; bright- ish.	White to creamy white; bright,	ish.	White to creamy-white; brightish.	White to crea- my-white,	White; bright.								
Cleanliness		••	Callly clean.	Somewhat leafy.	Faltly clean.	l'airly clean.	A little stained ; fairly clean.	Pairly leafy.	Contains leaf.	A little leafy.								
Feel	••		Good silky.	Good soft.	Good softish.	Good soft.	Good.	Good smooth.	Soft.	Good smooth.								
Cinning and	neppi	ncs5	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-glaned.	Well-ginned.								
Seeds	••	١.,		1.6% unglaned,	4,-,	••		••	,.	**								
Card sliver			Clean,	Clean.	Clean.	Clean.	Clean.	Clean.	Almost clean.	Pairly clean.								
Card web	••	••	Good.	Cood,	Even and nep- free.	Full and free of	Web good.	Even ; nep-free.	Slightly neppy.	A little neppy.								
Weight of to	n fiat al	rips	10.5 granı4.	13,2 grams.	14.9 grams.	15.0 grams.	16.3 grains.	16.5 grams.	14.8 grams.	14.4 grams.								
Ilemarks*	•••	••				••		••		٠٠ , ,								

### (b) Yarn :--

ı						JAGADI	Δ.					
			1030-31,	1931-32.	1932-33.	1033-31.	1934-95.	1935-30.	1930-37.	1037-38.		
Cleanliness	•••		Clean, .	Clean.	Clean.	Clean,	l'airly clean.	A little leafy.	Almost clean.	Fairly clean.		
Evenness	••		Even.	Even.	Fairly even.	Even.	Even.	Even.	l'airly even.	Even, .		
Nepplaces	••	••	Fairly free of	Almost free of	Almost nep-free	Almost free of nep.	Fairly free of nep.	Practically free of nep.	Fairly noppy.	Fairly free of nep.		
Slubbiness	••	••				"			••	٠٠ ,٠		

<sup>3.</sup> Spinning Test Details and Results:—See Table 9 on page 27.

IL-REPORT OF THE STANDARDS COMMITTEE FOR JAGADIA COTTON.

Contract valued under F. G. M. G. Broach F. G. M. G. May 1931 H. G. M. G. May 1932 Gloss	1931-32.				
l undor		1034-35.	1935-36.	1930-37.	1937-38.
	II. G. Bronch F. G. M. G. Bronch F. G. M. G. Bronch F. G. M. G. Big. No. 2, f 1913. 1013.	F. G. M. G. Broach H. C. No. 2, April/ May 1935 dolivery.	F. G. M. G. Bronch H. C. No. 2, July/ August 1030 doluvery.	F. G. M. G. Bronch F. G. M. G. Bronch F. G. M. G. Bronch Angust 10 3 0 No. 2. H.C. No. 2. Aprily dolivery.	F. G. M. G. Broach H. C. No. 2, April/ May 1939 dolivory.
	Tino Fino	:	Fmo	Fino	Fine to superfine.
	White White White	Greamy white	Whitish	White	Dull white.
	7/8 meh 20/32 inch	7/8 inch to 15/16 inch.	to 15/16 15/16 inch	29/32 inch	7/8 inch.
Rogular Regular Rogular Rogular Rogular Res. 45 on Rs. 183 Rs. 164 F. G. M. G	Fair Good Good	Fair	Good	Good	Fair.
Rs. 65 on Rs. 46 on Rs. 45 on	Rogular Rogular Rogular	Fair	Regular	Regular	Rogular.
	Rs. 45 on Rs. 45 on Rs. 70 on	Rs. 85 on	Rs. 35 on	Rs. 52 on	Rs. 35 on.
THE TOTAL STATE		Broach F. G. M. G. G. M	F. G. M. G. Broach H. C. No. 2, July/ August 1936 deli- very, Rs. 223,	F. G. M. G. Broach H. C. No. 2, April/ M. a. y. delivory, Rs. 246.	<ul> <li>F. G. M. G. Broach</li> <li>H. G. No. 2, April/</li> <li>May 1030 delivery,</li> <li>Rs. 151.</li> </ul>
Date of Valuation 6-5-31 30-5-32 24-5-33 3-5-34 15	30-5-32 24-5-33 3-5-34	15-4.35	24.6.36	16-3-37	10-9-38.
Romarks	:	:	:	;	;

15	TIVE Y (%).		Testing Room.		; ŧ	S 8	9	8	88	5	2	8	. g	. 2	8	. g	. s	S	89	5	15	<u> </u>	15	83	: ::: ::::::::::::::::::::::::::::::::	<b>2</b>	_
20	BELATIVE HOMIDITY (%).		Splaniug Room.	}	3 4	3 8	29	99	8	8	89	63	89	89	8	20	8	12	92	22	99	67	29	2	89	n n	
ន	TEMPE- RATURE		.mooff yalaalg	8	2 8	8 8	16	93	91.	69	16	g	06	88	88	8	89	98	87	87	28	80	33	87	80	88	
đ		.lsu	Tuttas per inch Actual.			6		19.0	21.3	10.1	21.3	17.3	10.1	21.2		10.0	21.3	17.2	18.8	20.3	17.3	10.1	21.1	17.2	13.7	20.0	
ន					0	1.3	1.2	1.8	6:1	0:	1.8	1.8	1.5	1.8	1.6	o ci	1:0	1.5	1.0	2:52	61.0	3.5	8.0	0.8	1.0	7	
81				, 7	. 13	60	u	4	-	13	60	<b>-</b>	13	6	 67	13	63	+	7	69	4	13	8	-	<u> </u>	-	
ត	SULTS.		Count-Work Product.	195 0	0.379	2,406	2,533	2,410	2,521	2,570	2, 107	2,633	2.700	2,643	2,395	2,620	2,035	9,503	2,513	2,507	2,704	2,051	2,503	3,041	81848	2,720	-
8	XMX TEST RESULTS	Daleistic.	Work of Rupture ( inch-iba.)	113.9	6.76	70.4	120.4	101.8	84.0	108.8	So. 1	129.8	111.8	83.1	120.0	108.2	S0.4	128.0	100.4	83.0	133.2	110.0	86.6	153.6	121.2	13	-
33	Хлля	"	Counts Actual.	20.5	1 10	30.3	20.3	21.1	29.8	23.7	30.3	20.0	61	20.0	20.3	5.3	20.7	20.2	23.0	30.2	20.3	21.1	28.0	10.8	23.5	90.0	1
18			Count-strength Product,	1.540	1.470	1,353	1,592	1,429	1,375	1,510	1,383	1,704	1,735	1,581	1,548	1,536	1,423	Ę	1,673	1,176	1,725	1,686	1,527	2,014	1,06,1	1,710	1
17		LEA.	Strength (ibs.)	77.7	01.0	15.4	29.0	50.3	17.1	63.2	10.1	88.8	73.0	53.0	75.5	0.10	48.0	83.1	20.0	40.7	85.8	13.0	51.6	101.7	83.1	58.0	
10			Counts Actual	10.9	21.1	8.03	20.0	21.1	20.2	23.9	20.8	29.0	23.0	20.3	30.5	24.0	20.1	20.1	33.0	29.7	20.1	23.1	30.0	20.1	23.0	30.0	
15		Turns per inch.		17.98	19.73	23.11	17.08	19.73	21.56	19.73	21.56	17.98	19.73	21.86	17.98	10.73	21.80	17.03	10.73	21.80	17.03	19.73	21.86	17.08	19.73	21.86	
2	Particulars. •		Diale.		0.50	7.83	5.05	7,14	2.00	5.51	6.71	5.85	5.45	6.71	5.05	5.33	0.07	5.05	5.55	6.94	6.23	5.20	0.83	5.93	5.31	6.71	
22		ж.ч.	Spir dle Spred, ILP.2		008'6	008'0	0,500	0,550	0,000	0,650	0,400	9,730	0,300	0,500	9,200	9,500	8,300	0,550	000'6	9,530	001'0	0,450	00,400	10,300	10, 100	006'6	
Ħ	RING FRANTS	'pan	Front Roller Sp. R. P. M.	190	178	150	194	177	160	180	153	103	180	158	102	176	143	190	171	55	183	100	153	215	102	167	
=	F	lot bet	Yarn Breakages 100 spindles hour,	ŧ	a	53	23	đ	2	=	티	2	•	င္မ	9	 8	12	۰	•	ន	17	81	8	•	· ·	g 2	
5	OES.		Total Loss.†	16.0	:	:	15 3	:	:	16.5	:	14.8	;	:	15.6	:	:	15.9	:	:	15.2	:	:	15.5	;	:	
٥	WASTE PERCENTAGES.		Spinning Loss.	0.5	:	:	9.0	:	:	0.5	:	0.3	:	:	0.4	:	:	0.3	:	_!	0.3	:	:	÷.	:	:	
80	д ятах		Card Room Loss	8.0	:	:	10	:	_ļ	8.	_	.;	:	_ļ	8.3	:	_!	8.8	:	_ļ	 8.3	:	<u> </u>	œ.	:	:	
<u> </u>		·1	Blow Room Less	8.3	:	:	8.0	:	:	8. -	:	9.	:	<u>: </u>	r. 	:	<u>:</u>	:	:	:	:	:	<u>: </u>	<u>:</u>	:	:	;
. =		e, Iba.	Weight of Samp	2			2			٥		9			2			2			<b>≘</b>		]	2			
25		•	Counts Nominal	ន	ä	ន	ន	எ	ន្ត	<del>-</del>	ខ្ព	ន	ä	ន	ន	캶	ន	ន	टा	8	61 		_ _	S :	# ·	8	
4		,	Dato of of Spinning.	11-5-31	12-5-31	12-5-31	0-6-32	9-6-33	8-0-33	1-6-33	1-6-33	라	# 4-8	25-5-32 25-43-32	5-0-35	6-6-35	6-6-35	3-7-36	9-7-36	4-7-30	25-3-37	30-3-37	31-3-37	20-0-33	26-6-33	20-9-33	
e -			Scason.	1030-31	1930-31	1030-31	1031-32	1031-32	1931-32	1932-33	1932-33	1933-34	1033-34	1933-34	1931-35	1934-35	1934-35	1935-36	1935-36	1035-30	1930-31	1936-37	1936-37	1037-38	1937-38	1937-38	
61			Cotton.	Jagadla	Jagadia	Jagadla	Jagadla	Jegadla	Jagadia	Jagadia	Jagadia	Jagadia	Jagadia	Jagadla	Jagadla	Jagadla	Jagadla	Jagadia	Jagadia	Jazadia	Jagadla	Jagadia	Jegadia	Jegadia	Jagadia	Jagadia	
-	<u>.                                    </u>	····	Sample No.	1017 Jag	1047 Jag	7-1			7		1						1			$\neg$						4255	
ł	as as					- }		•				-		1		•	I			ſ			1			ı	

If the to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here, \*Diameter of ring frame front roller—7/8". Diameter of ring —1 5/8".

### 10,-SURAT COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
1022	Surat.	Surat.	1930-31.
1353	Surat.	Kosamba.	1931-32,
1783	Surat.	Surat.	1932-33.
2236	Surat.	Surat.	1933-34.
2837	Surat.	Surat.	1934-35.
3163	Surat.	Surat.	1935-36.
3545	Surat.	Ankleshwar.	1936-37.
4061	Surat.	Surat.	1937-38.

### I.—Spinning Tests.

### 1. Treatment :-

- (a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:-

				Sungr				
	1930-31.	1931-32	1932-33,	1933-34.	1934-35.	1035-36.	1936-37.	1937-38.
Colour	White to creamy-white.	White bright- ish.	Creamy-white; bright.	cream t-	White to		White; bright.	White.
Cleanliness	Fairly clean; very bright.	Somen hat leafy.	Fairly elean	white; bright. Clean	wlute ; bright. Fairly leafy	Clean	Contains a little leaf; a trific stained.	
Feel	Very soft.	Soft elle).	Good emooth	Good soft.	Good		Soft.	Good soft.
Gianiag and Nep- piness.	Well-gianed,	Well-gluned.	Well-ginned.		Fairly well-		Well-glaned.	Well-glaned.
Seeds			<b></b> .	1% unglaned.	Qood umouut of unginned sceds.		"	**
Card Sliver Card Web	Clean. Very good.	Almost clean. Farly good.	Almost clean. Even and nep- free,	Clean. Good.	A little leafy.	Clean. Even and nep-	Allttle	Fairly clean, A trule neppy,
Weight of ten flat strips.	11.0 grams,	14.3 grams	15.1 grams.	14.7 grams.	18.1 grams,	free. 12.3 grams.	neppy. 13.4 grams.	18.7 grams.
Remarks							44	

### (b) Yarn :--

				Sur.	AT.		•	
	 1930-31.	1931-32.	1932-80,	1033-31	1031-35,	1935-36.	1936-37,	1937-35.
Cleanliness Evenness	Fairly clean, Even,		Cleap. Fairly even	Clean. Fairly even.		Almost clean. Even.	Almost clean. Even.	Almost clean, Even in the lower counts
Neppiness Blubbiness	 Practically free of nep,	Almost free of nep.	Free of nep	Calriy free of nep,	A little neppy. Occusionally slubby.	Free of nep.	Slightly neppy.	miy. Farly free of nep.

<sup>3.</sup> Spinning Test Details and Results: - See Table 10 on page 30.

II.—REPORT OF THE STANDARDS COMMITTEE FOR SURAT COTTON.

						Schat.	ļ			
	ι.		1930-31.	1931-32.	1032-33.	1933-31.	1934-35.	1935-36.	1936-37.	1937-38.
Contract valued under		:	F. G. Broach No. 2. F. G. M. G. Broach F. No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, April/May 1933.	G. M. G. Broach F. G. M. G. Broach F. C. M. G. Broach F. C. M. G. Broach F. G. M. G	F. G. M. G. Bronch Hedge Contract No. 2, July/August 1935 delivery.	F. G. M. G. Broach Hedgo Contract No. 2, April/May 1936 delivery.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach H. C. No. 2 April/ May 1938 deli- very.
Class	:	:	Barely Superfine.	Fine.	Fine-	Fine to Superfine.	Fine.	Fine to Superfine.	Fine to Superfine.	Fine.
Colour	:	:	White.	White.	White but slightly White, creamy.		Whitish.	White.	White.	White; slightly creamy.
Staple Length	:	:	Full 15/16".	7/8".	15 16".	7/8″.	, R.	15/16"	7,8.	29/32".
Staple Strength	:	:	Fairly good.	Fair.	Fuir.	Good.	Fair.	Good.	Good.	Fair.
Regularity	:	:	Regular.	Fair.	Trregular.	Regular.	Fair.	Slightly irregular.	Regular.	Fair.
Value above or below contract rate	ontrac	t rate .	Rs. 75 on.	Rs. 50 cm.	40 cm.	Rs. 70 on.	Rs. 60 on.	Rs. 50 on.	Rs. 55 on.	Rs. 55 on.
Basis	:	.:	Rs. 201.	Rs. 164.	F. G. M. G. Broach No. 2, April. May 1933 dolivery Rs. 202.	G. M. G. Broach F. G. M.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1935 delivery Rs. 224.	F. G. M. G. Broach I Hodgo Contract No. 2, April/May 1036 delivery Rs. 203.	F. G. M. G. Broach Hedgo Contract No. 2, 'April/May delivery Rs. 246.	E. G. M. G. Broach H. C. No. 2 April/ May 1938 deli- very Rs. 169.
Dafe of Valuation	:	:	1-4-31.	30-5-32.	24.5.33.	0-1-31.	20-8-35.	23-1-36.	16-3-37.	10.5-38.
Remarks	:	:	:	:	:	:	;	:	:	:

COTTON.
SURAT
FOR
RESULTS
TEST
10.—SPINNING
Table

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ŧ	1	ii.	Inom:	idioT	Ę	9 5	Į	; <b>£</b>	; 2	g	3	5	; ;	2	3	8	2 2	s. 03	6	2 6	2 <b>5</b>	1	3 2	67	;	2 1	2 5	:
85	1 12	Mryintry (**).	strooff g	alaniqe	50	<b>5</b>	5	· 2	6	٤	<b>.</b>	٤	. 8	8	S	5	8 8	6 8	1	;	8 8	g	3 8	89		8 9	2 6	
83	Trum n.	YTURE ('I').	-moost 21	alaaiqt	8	10	8	16	10	8	ã	8	8	88	87	ã	; ;	38	8	£	. E	ž	3 23	120	;	3 8	3 8	
7,			per lach. Lal	Turns	18.8	23.5	17.3	10.1	91.9	17.9	18.8	17.3	101		2:5	17.1		1:1	17.6	2	21.1	12.1	10.0	91.3			1 ::	
23		-	Mac top	Zebe l	61.1	1.7	e:	1.8	6.0	9:	61	1.6	6	1.5	1.8	0		1.9	200			a			:	3 .	9 01	
8		-	es Char	Es enno		4	63	*	•	-	10	-	7	13		er	, -	. 13	"		13	1 12	•	4	,	. ,	13	wn here.
ä	RP4ULT4,	-	Moth.	Count	2002	2168	2348	5533	2280	1155	54.53	8072	1692	2724	2000	2480	1.00	2027	23.53	9549	2517	2015	2013	2591	1 8	97.5	9710	than sh
င္ပ	Trer Rye	Bullistic.	rwhyvH lo ( di-r	110 // dant)	8.101	70.0	110.8	61	78.0	125.3	102.2	130.8	100.8	80.2	0.00	143.0	6	65.6	110.0	104.2	80.4	128.9	113.6	93.9	9	93.4	71.4	ruld be Ira
2	Y.IRY		laulok el	Сопи	23.0	91.0	20.1	23 7	20.3	30.1	93.9	20.7	25,1	31.0	10.1	1.05	1.05	40.6	20.6	21.1	31.3	80.3	93.0	27.9	1.0	100	39.5	ilons it we
E			digeni2-).	Contra	1185	1310	1470	1388	1219	1131	1316	1839	1770	1513	1322	2020	1691	1331	1563	1101	1165	1705	1701	1001	1863	1713	1331	ameter of thes=-11. inall sample weighing 10 1½, ; for bulk sample spun under mil conditions it would be less than shown here.
=		Lri	( हरी) प्रीज्ञ	D2218	1 20	43.4	73.9	57.0	ci ci	71.2	8.12	89.7	8.01	50.1	3.5 2.5	100.0	59.0	32.7	70.7	03.0	37.7	81.0	61 61	55.0	1.10	57.3	38.0	un ander 1
2			Janto A. ela	Coun		30.1	20.9	21.1	۰ و	20.1	0.4.0	20.5	24.4	30 8	e 6	8.3	28.0	10.7	10.4	24.1	30.9	20.3	23.4	13.7	20.4	20.0	38.8	onple sp
2			dost lach	unt .	10 73	24 63	17.09	10.73	21.80	17.08	10.73	17.08	19,73		25.28	17.08	21.30	25.23	17.09	13.73	21.80	17.04	10.73	21.56	17.93	21.66	25.28	for bulk s
=	Pintici Ling.	į	'1	ned .		8 03	26 2	2.00	0.01	5.03	0.33	5.93	5.13	6.70	0.0 0.0	6.83	6. 17	8.83	6.93	5,33	6.11	o 10	5.37	6.9 19.	5.93	6.13	8.17	# 10 lyv. ;
2			le M alk Speal,	N Spile.	9700	10500	0000	9550	0200	0020	9630	0830	0000	0200	0200	0200	0220	0000	0200	0690	8000	9200	9120	0010	10400	10500	0080	rhes—11
=	IIVO FRANE		tolloll 3 W. H. H. Mood, H. P. M.	nor'i ogd	180	160	105	178	021	103	178	193	182	160	140	193	100	140	101	178	113	190	174	157	Ť	178	138	ineler of inall samp
=	=	i.	t loo elde.	514.7  34  1b	ć	នួ	-	2	63	111	118	13	ŧì	8	ဗ္ဗ	c	1-	ខ	0	:	28	E	a	2	1.9	17	ti	Disreter of the frame front collection. It is to be noted that the total loss is for an
<u>ا</u> ۾	<del></del>		taso. I	tist_	4.5	:	15.9	:	:	13.9	:	14.3	:	:	:	17.1	:	:	10.1	:	:	15,0	:	:	14.3	:	:	of it follow
۵	Waste Pepalutiops.		.t.o.1 Lala	rapis -	2.0	:	0.0	:	:	0,5	:	0.5	:	:	:	0,3	:	:	0.3	:	:	0,3	:	:		:	:	the from
æ	E PEP		Noots A	לבהן 125	.:	:	E1 60	:	:	61	:	5.3	:	:	:	17	:	:	9:	:	:	÷.	:	:	8.1	:	:	ring fr
-	15TAL	Ì	ti'uviti ss.	W. Id.	2.0	:	H.0	:	:	ci ž	:	0.0	:	;	:	8.1	:	:	7.	:	:	0.	:	:	6.1	:	:	reter of
•	٠,	ગા *	ارا دا مسرا	W.C.	2		2			2		10				10			2			2		1	10		_	1741 • •
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-			264le Coffee Tylonbre		11-1-11	11-1-31	3-6-33	1-6-33	7-6-12	19-5-33	10-5-33	12-1-21	17-4-71	14-1-21	10-1-01	29-4-35	31-4-15	37-435	0.4	95	6.4.	30-3-37	31-1-37	7	11-3-24	7	F-4-6	
-			ř. 49.		17.61	15.00	17 IT 01	1231-72	1931-32	1912-23	1032-37	10-2101	15:1:31	1023-11	16-5161	1311-35		55 55	1911-24	1311.53	P2 d	19 14-37	10.00				1 11 - 24 - 1	
,		~~	 !		•	<sup>'</sup>		<del>-</del>		:	•	-:	:		:	:	•	:	<del></del>		:			-	:		-	بذمر
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### 11.—NAVSARI COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample .	No.	Cotton.	Place.	Scason.	Sample .	No.	Cotton.	Place.	Season.
1048		Navsari	Navsari.	1930-31	2828		Navsari.	Navsari.	1934–35
1354		,,	,,	1931-32	3162		,,	"	1935-36
1784		"	>>	1932-33	3565	••	"	Mahuvar.	1936-37
2435	• •	,,	,,	1933-34	4074		,,	Navsari.	1937-38

### I.—Spinning Tests.

### 1. Treatment:-

(a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Fame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton :--

				NAV	eari.			
	1030-31.	1031-32.	1032-33.	1033-31.	1934-35.	1935-30.	1936-87.	1037-38.
Colour	White to creamy-white; bright,	White; bright.	White to creamy-white; bright.	White; bright.	White; bright.	White; bright.	White.	White.
Cicanliness	Clean to fairly clean.	Fairly clean.	l'airly clean.	Clean.	Clean.	Clean.	l'airly clean ; a trille stained.	Clean.
Feel	Silky and bodied,	Very good.	Silky and bodied.	Smooth bodied	Good,	Smooth and bodied.	Good.	Soft.
Ginning and Neppi- ness	Well-ginned.	Well-ginned.	Well-ginned.	Fairly well- ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Beeds								
Card Silver	Clean.	Clean.	Clean,	Clean.	Soft ; clean.	Clean,	Almost clean,	Clean.
Card Web	Very good.	Good.	Even and nep- free,	Full.	Full.	Even and nep- free.	Good.	A triffe neppy.
Weight of ten flat strips	8.1 grams; very light,	13.5 grams.	13,5 grains,	20.7 grams.	19.0 grams.	13.3 grams.	12.5 grams.	14.5 grams.
Remarks	A very desimble cotton.		·				••	••

### (b) Yarn :--

•					NAV	SARI.			
		1930-31.	1931-32.	1032-33.	1033-31.	1034-35.	1935-36.	1939-37.	1937-38.
Cleanliness	•	Clean.		Clean.	A little leafy.	Clean.	Clean.	Almost clean.	Almost clean.
Evenness		Even,	Even.	l'airly even.	l'airly even.	Even.	Very even.	Fairly oven.	Even.
Vennlass."	•	Fairly free of nep.	Almost free of nep.	Free of nep.	Fairly free of nop.	A triffe neppy.	Nep-free.	Almost free of nep.	Slightly neppy.
	•			••				••	

Spinning Test Details and Results:—See Table 11 on page 33.

II.—REPORT OF THE STANDARDS COMMITTEE FOR NAVSARI COTTON.

1931-36.  G. M. G. Broach Gg Contract No. Jago L. C. No. Jago July Jago Contract No.								NAVSANI	E			
valued under         F.G. M. G. Broach         F.G. M. G. Broach           valued under         No. 2.         No. 2.           No. 2.         No. 2.         Broach           valued under         No. 2.         Broach           valued under         No. 2.         Broach           valued under         Creamy-white.         Creamy-white.           creamy-white.         Creamy-white.         Creamy-white.           rength         16/16 inch.         16/16 inch.           rength         Fairly good.         Good.           rength         Fairly good.         Good.           rength         Regular.         Regular.           render         184. 182.         R4. 161.           render         16.53.         R4. 161.	,						-	.]	ł		ı	
valued under          F. G. M. G. Broach         F. G. M. G. Broach              Suporfine.         Fine to superfine.              Orenny-white.         Greanny-white.              15/10 inch.         16/16 inch.              Fairly good.         Good.              Fairly good.         Good.              Fairly good.         R8, 60 on.               R8, 161.               R8, 161.		}			1630-31.	1031.32.	1032-33.	1933-31.	. 1	1035-36.	1036.37.	38.
Suporfino.   Suporfino.   Fine to suporfino.	Contract valued under	<b>:</b>	:	:	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, April/May 1933.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach Hedge Contract No. 2, July/August 1936 dolvery.	F. G. M. G. Brouch Hodge Contract No. 2, April/May 1936 dollvery.	F. G. M. G. Broach M. C. No. 2.	F. G. M. G. Broach H. C. No. 2. April/Mry 1938 dolivory.
mgth Gramy-white. Gramy-white. rongth 15/10 inol.  i. f. 16/10 inol.  i. f. 18/10 inol.  i. f. 18/	Clust	:	:	:		to superfine.				Baroly superfine.	Fine to superfine.	Fine to superfine.
rength 15/10 inoh, 15/10 inoh. rength Fairly good. Good Fairly good. Good Frairly regular. Regular Frairly regular. Regular Rs. 85 on Rs. 182 Rs. 161.	Colour	:	:	:			White but slightly creamy.				White.	White; slightly orcany.
rength Fairly good. Good.  .y	Staple Langth	:	:	:	15/16 inch.	l6 inch.					29/32 inch.	7/8 inch.
.v	Staple Strongth	:	:	:							Fair.	Fair.
ove or below Contract 1ate	Regularity	:	:	:	Fairly regular.						Slightly irregular.	Fair.
nluntion 5-6-31. R9. 104.	Value above or below (	Contra	et rato	:		00 on.					Rs. 80 on.	Rs. 60 on.
'nduntion 6:6.31. 30-6.32. 24.6.33. 31.7.34. 13.8.36.	:	:	:	:		164.	<ul> <li>F. G. M. G. Broach</li> <li>No. 2, April/May</li> <li>1933</li> <li>delivery</li> <li>Rs. 202.</li> </ul>	F. G. M. G. Browch, July/Angust 1934 dolivery Rs. 221.	H. C. M. G. Brouch H. C. No. 2, July/ August 1935 do- livory Rs. 224.	F. G. M. G. Broach H. Contract No. 2, April/May 1036 dolivory Rs. 203,	F. G. M. G. Broach H.C. No. 2, April/ May 1037 delivory Hs. 250.	F. G. M. G. Broach H.C. No. 2, April/ May 1938 delivery Rs, 169.
: : : : :	Date of Valuation	:	:	:		-32.					6-1-37.	10-5-38.
	Romarks	.*	:	:	:	•	•	:	:	:	:	:

Table 11.—SPINNING TEST RESULTS FOR NAVSAR

## Table 11.—SPINNING TEST RESULTS FOR NAVSARI COTTON.

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BRLATIVE	14 (%)	Testing Room.	67	60	8	8	8	99		23	25	18	18	55	22	20	6	r	Ç1	89	20	8	22	89	89
BKL	IIONOII	Spinning Room,	63	3	99	20	3	67	83	90	96 80	80	80	ĝ	틵	Ľ	89	.r	89	89	88	88	99	69	60
Temper-	(E.)	Spinning Room.	8	8	80	06	16	10	10	10	<del>1</del> 8	7	<b>7</b> 8	80	35	86	88	80	89	88	80	88	96	8	10
	.fauð	Turns per Inch. Au	17.3	10.1	÷.	17.1	10.2	21. ‡	10.0	20.0	17.2	21.0	1.00	17.0	19.0	20.7	17.2	10.1	21.0	17.0	18.8	20.0	17.0	18.7	20.0
		Neps per yard.	1.2	1.5	9.0	1.8	9.0	0.0	1.0	1.0	9.8	ei ei	2.5	13	0	0.	0.5	8.0	9.0	1.0	1.0	9.0	1.8	1.6	1.8
		Evenness Class,	e:	4	13	6	4	2		7	63	12	9	e-	es	7	8	n	7	7	7	ış	C1	63	7
LTS,		Count-Work Product.	2307	2367	2100	2085	2145	2453	1712	2501	2067	2503	2008	2700	2775	2690	1617	2521	2540	2681	2620	2560	30-10	2808	2817
YARN TEST RESULTS.	BALLISTIC.	Work of Bupture (inch—lb.)	117.2	98.3	81.0	135.0	1.00	87.0	101.4	84.2	131.4	88.2	78.8	134.8	116.6	85.4	125.2	104 6	85.8	135.4	110.0	80.3	152.0	111.0	03.0
YARY T	æ	Counts Actual.	8.3	1.45	20.7	10.8	0.4.0	28.3	23.7	20.7	20.3	7.03	33.1	20.2	8.8	31.5	19.9	24.1	20.0	10.8	33.0	28.7	20.0	24.5	30.1
		Count-Strength Product.	1157	1206	1301	1660	1300	1363	1300	1326	1703	1173	1340	1701	1708	1513	1716	1543	1-16-1	1831	1003	1597	1967	1781	1640
	LEA.	Strength (lbs.)	2.5	0.49	11.7	76.8	57.70	18.0	62.5	e1 ‡	85.0	10.1	0	36.5	76.3	18.5	85.8	63.6	10.3	91.7	8.00	53.6	97.4	12	54.6
		Counts Actual.	1.03	0.43	29.1	19.8	61 61	28. 1	94.0	30.0	30.G	30.0	33.1	20.7	3.6	31.3	9.0	8.4 8.4	20.6	9.0	0.42	8.02	20.3	8.43	30.3
		Turns per inch.	17.08	10.73	23.11	17.08	19.73	21.80	10.73	21.80	17.98	21.80	23, 26	17.98	19.73	21.80	17.98	10.73	21.80	17.08	19.73	21.80	17.98	10.73	21.86
ULARS. •		Dialt.	6.41	6.38	2.65	5.08	2 00	70 9	5 28	7.00	6.59	6.58	7. 15	5.05	5.20	0.71	5.85	5.43	0.41	3.95	5.44	0.03	0.10	5.51	6.79
FRANCE PARTICULARS.	.IZ.9	Chindle Speed, R.I	0800	0800	0800	9650	9530	9200	9620	9020	9350	0200	9050	9500	0026	0200	0000	0026	8000	10200	0200	0200	10400	10400	10400
Ring Fra	•	Front Roller Speed B. P. M.	190	178	156	103	178	120	178	154	197	162	146	106	178	157	105	178	120	310	178	100	214	103	180
	100	Yarn Breakages por Tuod teg per hour	9	0	37	0	83	40	27.	00	0	10	36	16	£	30	10	121	20	10	22	83	13	11	ន
EB.		Total Loss.†	13.7	:	:	13.1	:	:	14.1	:	15.6	:	:	15.8	:	:	10.1	:	:	11.3	:	:	13.4	:	:
Wastr Percentagrs.		Spinning Loss.	0.4	:	:	1.0	:	:	0.4	:	0.3	:	:	0.6	:	:	0.3	:	:	0	:	:	0.3	:	<u>:</u>
STE PE		Card Room Loss.	7.9	:	:	7.7	:	:	8.0	:	10.4	:	:	10.0	:	:	<u>.:</u>	:	<u>:</u>	8.0	:	:	8.0	: —	-
УД		Blow Room Loss.	0.0	;	:	5.5	:	:	6.3	:	5.0	:	:	5.9	:	:	e: ::	:	<u>: </u>	. G	:	<u>:</u>	5.6	:	<u>: </u>
	(Jpar)	Weight of Sample	83			10			0		2			10			2			ន		_	2		
		Counts Novilnal.	30	57	30B	20	캶	30.1	30	307	ရ	30A	31	og G		30A	ន	ត		ន	ä	30.	ಜ	참	307
		Dafe of Spinning.	11-5-31	12-5-31	12-5-31	7-0-32	7-0-33	8-0-32	30-5-33	31-5-33	9-8-34	9-8-34	9-8-31	26-8-35	21-8-35	24-8-35	30-1-30	30-4-36	1-5-36	13-4-37	13-1-37	14-1-37	23-5-38	30-5-38	30-5-38
		Scason. S	1030-31	1030-31	1030-31	1031-32	1031-32	1031-32	1032-33	1032-33	1033-34	1033-31	1033-31	1931-35	1031-35	1034-35	1035-30	1935-36	1035-36	1030-37	1030-37	1036-37	1937-38	1037-38	1037-38
<u>;</u>	<u>_</u>	<u> </u>	-	:	:	  :  -	:	: 1	:	: :	  -  -	:	j.i	[1]	: E	E .	:	:	-    - 	<u>:</u>	:	<u>=</u>	<del>:</del> =	: E	÷
<u>'</u> ',-		Cotton.	Navsari	Navanri	Navsari	Naveari	Navrari	Navsari	Navsari	Naveart	Naveari	Navsari	Navearl	Navenri	Nav sari	Yaveari	Navari	Navear!	Naveari	Navbari	Nav Bari	Mayearl	Navgari	Navsari	Navsarl.
,		Sample No.	1048	1018	1048	1351	1321	1354	1781	1821	2133	2435	2135	9828	2823	2828	3162	3103	3162	3505	3665	3265	1074	1074	1074

• Diameter of rings—14". † It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

### 12.—DHOLLERAS COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.		Cotton.	Place.	Scason.
724	Dhollera	s (Fine) Vagadia	Wadhwan	1929-30.
725	,,	(Saperfine) Vagadia	,,	1929-30.
1126	Dhollera	Vagadia	٠,	1930-31.
1368	**	11	Limbdi	1931-32.
1886	"	7)	Kndi	1932-33.
2357	99	11	Wadhwan	1933-34.
2830	,,	11	Manavadar	1934–35.
3231	,,	*1	Bawla	1935-36.
3097	>)	D.	Dhandhuka	1936-37.
4135	**	**	Dhrangadhra	1937-38.

J.—SPINNING TESTS.

### 1. Treatment:-

- (a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. I.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton :--

						Du	olepris.					
Seasor	· _	_ }	1020-30 (Fine.)	1929-30 (Superflar.)	1930-31,	1011-32,	1032-33.	1933-34.	1034-35.	1933-36.	1936-37.	1937-38.
Colour	٠	!	White to creamy - white	Dullish white	Creamy- white.	Dulliah white	White to creamy white; brightl-h,	creamy. white: fairly		White to creamy white; bright.	creamy-	White dullish.
Teanliness	••		Very Leafy ( sandhke leaf ), p good deal stained.	Leafy; slightly stained.	Leafy; occasional spot of atain.		somenhit leify.	bright. Very leafs with oc- casional stains.		Fairly leafy,	Very less.	Leafy.
reel	"	٠,	•	Detter feel than Fine Dholleras	eoit.		Good,	Good.	Fairly Good	Good boiled	Calriy Good	Good,
	neppi	De44	Fairly well- ginned.	Fairly well-	Fairly well-	Well-glaneJ		Well-glaned.	Somewhat knotted.	Well-glaned.	Well-glase	Well-glane
ieeds	••		Occasional cnt; a fair amount of unripe fi- bre and 2 per cent, s c c d s— mostly un-	gmreu,	1.5% ungar- ned	2.1% ginned and ungur- ned	2°, partly ginned.	3.75% un- ginned (kapas).	Andreu.			Some ungir ned,
Card Silver	••		gunned. Clear.	Clear.	A little leafy	Almost clean,	Cican.	Fairly clean	Almost elean.	Almost clean.	Good; a little leafy.	A triff leafy.
Card Web	••		Clear,	Clear.	practically	Good.	Lieu and nep-free.	Good.	Good.	Good.	Good ; a	A triff neppy.
Weight of 16 Rémarks	) flat s	trips ••	10. 6 grams. A poor, was- ty sample.	Staple fine for its length but fregular in length and strength	ed.	13 5 grams, Fully press- ed.	18.0 grams.	20.2 grams	24.0 grams,			
(b)	)	ar	ı:		·	<del></del>		<del>'</del>	<del>'</del>			
		-	· 4									
				<del></del>			DHOLLFRAS,					
Seas	, מנ		1929-30 (Fine.)	1029-30. (Superfine )	1930-31.	1931-32,	1932-83,	1933-34,	1934-35,	1935-36,	1930-37.	1937-38.
Cleanliness Evenness	••		Fairly clean	Clean Somen had	Fairly clean			l	Fairly elean	clean,	Fairly clean	, ,
Nepplaces			A little nep	uneven. A little nep	Fairly nep	Free of nep	1	Even Slightly nep-	l	Even		Even.

<sup>3.</sup> Spinning Test Details and Results: - See Table 12 on page 36.

II.—REPORT OF THE STANDARDS COMMITTEE FOR DHOLLERAS COTTON.

					<b>Опосебиля.</b>	in.19.				
;	1929-30. (Fine.)	1029-30. (Superfine.)	1930-31.	1931-32.	1032-33.	1933-34.	1934-35.	1935-36.	1036-37.	1937-38.
Contract valued under F.G.M.G. Broach, F.G.M.G. Broach, F.G.M.G. Broach F.G.M. So. 2.	F.G.M.G. Broad	ch. F. G. M. G. Bronel	h. F.G.M.G. Bronel No. 2.	F.G.M. G. Broach F.	G. Broach July / / 1933 del	F. G. M. Hedge No.	F. G. M. G. Broach   Hedge Contract No. 2, July August 1935 do-livery.	F. G. M. G. F. Broach Hedgo Contract No. 2, April/May 1936 delivery.	Go. M. Broach Hec Contract No. July/Augi	G. F.G.M. G. Broach go Hedgo Contract g. No. 2, July/ 1st Aug. delivery.
Class	Fine	Strict superfine Fino		Fine to superfine.	Superfine	Fully good to fine About fine	:	Superfine	Fino	Superfino.
Colour	Silvery	Silvery	Bluish white	Bluish white	White	White	Creamy	White	Whitish	Dull white.
Staple Length	5/8-7/8 inch	7/8 inch	Barely 3/4 inch	13/16 inch	13 '16 inch	13 16 inch	3/4 inch	. 13/16 inch	9,'16 inch	11/16 inch.
Staple Strength	Poor	Fair	Wook	Good	. Good	Good	Fair	Good	Weak	Fair.
Regularity	Irregular	Fair	Irregular	Regular	. Regular	Regular	Fair	Slightly irregular. Irregular	:	Regular.
Value abovo or below Par	Par	Rs. 7 on	Par	Rs. 7 on	Rs. 7 on	Rs. 5 on	Par	. 6 on	Rs. 12 off	Par.
Bagis	Rs. 255	Rs. 255	Rs. 177	Rs. 152	F. G. M. G. Broach No. 2, July / August 1033 delivery Rs. 207.	M. G. F. G. M. G. Broach F. G. M. G. Broach F. No. 2, Hedge Contract Hedge Contract No. 2, July of Angust 1934 do: Angust 1934 do: Angust 1935	F.G.M.G. Brouch Indeed Contract No. 2, July August 1935 delivery Rs.221	F. G. M. G. F. Broach Hedge Contract No. 2. April/May 1936 delivery Rs.197.	F. G. M. Broach Hec Contract No. July/Aug. dl	G. F.G.M.G. Broach 12, Hedge Contract 13, No. 2, July/ August delivery 14, August delivery
Date of Valuation	29-4-30	29-4-30	14-7-31	13-6-32	26-7-33.	19-6-34.	13-8-35.	J-J-36.	28-6-37.	27-6-38.
Remarks	This year po	poor This year poor character.	:	:	:	:	:	:	Seedy.	:

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Table 12.—SPINNING TEST RESULTS FOR DHOLLERAS COTTON.

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ive irr		Testlug Room.	ž	3	3	63	2	19	<b>1</b>	2	5	2	8	נ	ş	£	5	8	18	71	į.	, p	à	i e	9	2	뀙	90	5. 2.
Hreative Hunidity (%).		moon yalnalq2	10	5	8	2	82	13	20	8	8	8	8	E	E	88	80	2		2	3	8	۶	? :	2	:	# #	61 60	<del>-</del> -
TEMPIN-		moon galaaige	06	ē	g	8	80	88	87	88	8	g	ž	88	98	80	ÿ	53	87	87	2	8	ä	5 5	3	8		76	ŧ
-		Turns per med. Jelual,	17.1	10 1	17.2	10 3	15.5	17.1	19.4	11.1	15.0	17.13	11.6	13.1	12.53	17.1	14.5	13.4	15,1	18.5	13.5	15.4	1.5	-			*: ::	7.7	17.4
		Keys per ) ard.	3.0	5.5	21	 2.1	::	61	4.7	9.9	0.5	80	15.0	1.0	12	1.8	0.0	1:0	8.0	1.0	8.0	1.0	٩			-	8.0	0.5	8.0
		I's ennes. Class.		כו	.,	12	.,	4	<del>-</del>	-	67	7	-	-	6		4	-	n		-	-	-	: :		7	m		<u> </u>
٥		Count-Work Product	1710	1440	1607	1757	2103	2010	2162	2380	5202	2057	8002	2331	923	2307	2263	2501	2130	2110	222	2023	9870	8606			2010	3008	 2
Yany Test Resouts	Baristic.	Work of Rap- (di-cloal) otat	- × 98	: :	83.2	87.0	120.0	102.8	110.2	170 0	127.4	100.0	180.0	191.1	158.4	114.8	110.1	-	138.8	105.4	207.2	162.0	213.6	186.5				188.0	8.121.8
rua Tes	E	Counts Actual	10 8	10.0	50.4	61 21	16.3	10.0	19.8	14.0	16.3	19.2	13.8	15.7	15.0	20.1	20.s	12.2	15.3	20.1	19.3	16.0	12.5				2		 ?:
·	_	Count-Strength Product	800	1117	878	1070	1207	1072	1230	1903	117.3	1133	1182	1147	521	1109	1959	1237	1157	1011	1237	1170	1200	1210	1001	2		1010	-
	LEA.	( edl) digasid	6.84	57.3	41,3	53.8	76.4	53.0	62.1	93.0	73.3	59.1	81.4	73.6	70.4	2.00	69.3	100.0	76.0	61.7	07.1	73,1	103.2	86.5	2	118.1		200	7.5
		Counts Actual	10.8	10 01	20.3	20.0	15.8	19.5	10.0	13.0	16.0	10 1	11.0	15.8	10.1	10.0	0.00	12.3	16.1	90.0	13.7	13.7	15.5	11.0	16.0	5		9 6	-
		Turns per luch.	17.08	20.33	17.08	20.23	13.07	17.08	20.93	11.08	15.07	17.08	11.08	15.97	13.07	17.08	10.20	13.02	15.07	10.26	13.02	15.07	13.02	11.98	15.07	14.98	15.07	17.09	
OULARS *		Draft.	0.70	6.76	0.70	6 76	5.78	6.10	6.25	5.00	2,00	5.71	5.31	5.00	6.11	5.88	5.80	5.95	5.33	11.9	5.31	5.33	٠٠ چ	5.2	5.03	6.31	5.08	5.78	
ик Рапті	K.T.	Spindie Speed, R	:	:	:	:	8800	8820	10750	7750	8300	0028	8250	8200	8230	8350	0800	7350	8050	9550	7350	8550	7800	7800	8200	8000	0000	10100	
RING FRANK PARTICULARS	,bosed,	Front Roller Sp R P. M.	160	173	160	172	198	170	187	100	100	17.1	108	184	103	176	188	108	138	180	ŧ0:	102	702	193	101	218	160	114	
	ng b rod s	Yarn Breakrag 100 spindle: hour,	2	10	0,	12	9	110	0,	<u>-</u>	8	65	53	55	g	ģ	85	-	55	ŧ	<b>~</b>	7.	16	•	•	8	13	92	-
JOES.		Total Loss.t	25.5	:	22.5	:	24.8	:	·	21.1	:	:	61 61	:	28.0	:	:	35.6	:	:	10.5	:	28.7	:	:	21.4	_;	: :	
WASTE IPRCENTACES		.820.1 galaniqë	0.7	:	0.0	<u>:</u>	0.0	:	<u>:</u>	0	:		0.	<u>: </u>	0.3	:		 -	:	:	0 0	:	0.3	:	;	3	:	: :	
ASTR P	.,	Card Room Los	10.0	:	0.0	_:	11.8	:	<u>:</u>	8.1	:	:	= 0	:	11.3	:	:	13.3	:	:	α, α,	:	12.1	:	:	11.6	:	:	
<b>*</b>	-"81	Blow Room Los	10.0	:	14.1	· :	1. 1.	:	:	13.0	:	:	13.2	<u>: </u>	18.0	:	:	13.8	:	:	8.0	:	15.8	:	:	14.8	:	:	
3')'	le, (lb	qma2 to tigleW/	10		91		0			2			2		2			22			2		2			2			1
	1	Counts Nominal	20.7	2013	20A	20B	91	E0.	20B	7	2	20.4	7	2	10	V02	20B	72	22	201	ဌ	=	2	11	16	=	2	¥02	1
		Date . of Spinning.	7-5-30	7-5-30	7-5-30	7-5-30	16-2-43	23-7-31	24-7-31	21-0-33	21-0-33	21-6-32	22-8-83	23-8-33	20-0-34	28-0-31	8-631	28-8-82 28-8-82	Se-8-16	27-9-35,	10-0-30,	10-0-30	12-7-37	10-7-37	10-7-37	12-7-38	19-7-38	0-7-38	
-		Se140B.	C 1020-30	1029-30	C 1020-30	1929-30	1030-31	1030-31	1030-31	1931-32	1031-32			1032-33	1033-34	1033-31	1033-34			1031	1935-36	1035-36	1036-37	1030-37	1030-37	1037-38	1937-38	1037-38	
		Cotton.	Dholleras	(Fine).	Dholleras	(Superflue).	Dhollcras	Dholleras.	Dholleras.	Dholleras	Dholleras.	Dhollcras.	Dholleras.	D'holleras.	Dholleras.	Dholleras.	ᆚ			L	_	ᆚ		Dhollcras.	Dhollera's.	Dholleras.	Dholleras.	Dhollerns.	
		So.	1 123	725 0	725] I	<u></u>			ᅷ		_	+		~;	_		+		n s	╅					ᅥ		1135 D	4135 D	

\* Diameter of ting—11".
† It is to be noted that the total less is for a small sample weighing 10 lbs, or thereabout, for bulk sample spun under mill conditions it would be less than sllown here.
The 1367-38 anmple has given exceptionally good results,

### 13.—KALAGIN COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
. : 757	Kalagin	. Manavadar	1929-30
1155	, ,,	. ,,	1930–31
1431	, ,,	Porbunder	1931-32
1888	,,	, ,,,,,	1932–33
2358	••	, ,,	1933–34
2771	,,	, ,,	1934-35
3327	,,	Manavadar	1935-36
3696	,,	Porbunder	1936–37
4137	,,	Manavadar	1937–38.

### I. SPINNING TESTS.

### 1. Treatment:-

- (a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
  - 1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:—

					Kalagis,				
	1929-30.	1930-31.	1951-32.	1932-33.	1033-31.	1934-35.	1935-36.	1930-37,	1937-38,
Colour	Duil creamy- white; fairly	Creamy- white.	White to crea- my-white.	Creamy-white; brightish	Creamy-white; fairly hright	Creamy white.	White to crea- my-white; brightish,	White to creamy-white, brightish.	White to
Cleanliness	bright. Very leafy Indeed.	Very leafy,	Very leafy.	Yery lenfy.	Very leafy; noticeably stained.	Very leafy.		Very leafy.	Very leafy.
Feel		Good-bo Hed.		Good.	Good Foft.	Good.	Good smooth.	Good.	Good.
Ginning & Nep- piness.	l'airly well- ginned.	A triffic knot- ted.	A trifle knot- ted and nep- ned.	••	Well-ginned,	l'airly well- ginued.	Well-ginned.	Well-gluned.	Well-ginned.
Seeds	2.5% ungln- ned.	3.5% ginned and uugin- ned.	Too many cut	ginned and	2.35% clern and ungin- ned.	Contains a good amount of partly ginged and full clean steds		A foy seeds.	A few glaned.
Card Silver	A little leafy.	A triffe leafy.	Leafy.	Leafy.	Leafy.	Leafy.	Leafy.	Very leafy.	Leafy.
Card Web		Lyen and nep-	l'airly good.	Good ·	Full.	Full.	Good.	Good; nep-	l'air; a little
Weight of 10 flat strips	16,9 grams.	free. 20.5 grams.	23.8 grams.	22, 1 grams.	32.0 grams.	30.0 grams.	13.7 grams.	10.0 grams.	22.2 grams,
Remarks	Licker-in fly No. 1 all trash; a fair amount of leaf shed over beam and ring rails.			: : : : :	 		: !	Very heavy strips; very much wasty in the blow- room and card.	room and
		<u> </u>				<u> </u>		•	İ
(b)	Yarn :-			<u> </u>		• ,			
	1 .				Kalagin.	1			
	1020-30.	1930-31.	1031-32.	1932-33.	1033-34.	1031-35.	1935-30.	1036-87.	1037-38.
Cleanliness	l'airly leafy.	A little leafy.	A little leafy.	Leafy.	Very leafy.	Leafy.	Leafy	Leafy, Fairly even,	Lenfy.
Evenness	Fairly even.	Fairly even.	Even.	l'airly oven.	Somowhat un-		Fairly even.	Fairly free of	Fairly even.
Neppiness	Pree of ncp.	Pairly free of nep.	Almost fire of	Free of nep.	slightly urp- pv.	A little slubby	t trac neppy.	nep.	Py.

<sup>3.</sup> Spinning Test Details and Results.—See Table 13 on page 39.

II.—REPORT OF THE STANDARDS COMMITTEE FOR KALAGIN COTTON.

								Kunem.				
1				1029-30.	1939-31.	1931-32.	1932-33.	Fr33 %8,		1 1733 24	rinds is the fact is the sense	1937-24.
Contract valued under	ler	:	:	F.G.M.G.Browh. F.G.M.	F. G. M. G. Beyer	No. 2.	P. G. M.G. Bross. No. 2, July A. Principury.	4.12.6 M.G. 11: 2. Holge C. 48 No. 2. July V	a. 7 to M to Pr a rest. Met Met M to M to M to M to M to M to M	And the state of t	# 1	d. Browk E. G. M. G. Browk P. G. G. Browk P. G. G. Browk P. G. G. G. Browk P. G.
Class	:	:	:	Find Find	;	Fuffy beef	. Pully and Y.O. and	to Y.O. Seed		*****	Production of the	، بر آه مغ يبه،
Colour	:	:	:	Very Wight blue Greying whier		Hiterore at wa	they als will be a shown	(***)	W. Carlotte William	18.1.2.		14
Staple Length	:	:	:	finch firth	:	I terb	Fall trait ge &		F - 1 - 2 -	, ,	· · · · · · · · · · · · · · · · · · ·	1 %.
Staple Strength	:	:	:	Good	Wenk	Fair	. Arthur farth fath.	. 1	Wrak	Wret	. W	
Regularity	:	:	:	Regular	ţ	ltrgutar	Herstar	and have and animals of the con-	*** Jone 7.8*	A San	free to 1 to	74.77
Value above or below contract rate Br. 10 on	w contra	ct mio	:		Re. 3 on	Re. 3 cM		87. 1 .1	ffr. 4 cm	7. 5. 1.	Pr. 5 1 1 154 1 1	F.v.
Bacis	:	:	:	Rs, 242	Rv. 162	Et. 219	F. 0. M. G. Hr. z. ( N. 2. J. 15) A. Hr. z. G. West. ( Hr. z. e. z	24. \$1.00 \$6.00. \$5.00 27. \$500.00 \$0.00 29. \$20.00 \$10. \$10. \$10. \$10. \$10. \$10. \$10.	ACCOUNT MAN TO THE COLUMN TO T		A CONTRACTOR OF THE STATE OF TH	FOLNE, Items [For the Market M
Date of Valentien	:	:	:	'4 6-30	100-31	11 72 4 44	26 7.33	!! !! !!			A 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	78 to 2
Remarks	:	:	:	:	;	:	;	;	:		:	:

	17	RELATIVE HUMIDITY		Testing Room.	۶	9	8	8	=	z	8	89	80	61 80	8	=	2	78	8	69	20	<b>₩</b>	83	8	8	5	8	8	
	98	HEL		Splaning Room.	89	89	82	7.	52	89	7.0	73	7.0	80	80	76	22	75	77	75	73	80	11	18	2	82	40	82	
	123	TRAFER-		Splanlug Room.	a	8	38	97	8	10	88	87	98	80	83	75	8	23	23	12	80	88	98	æ	*8	22	98	8	
	<del>.</del>			Turns per incle. Actual.	17.9	10.0	17.2	10.4	17.2	19.3	15.8	16.0	14.4	15.1	18.1	14.4	15.0	18.5	14.5	15.3	18.4	13.6	14.3	16.1	16.1	14.0	15.6	10.0	
	ន			Neps per yard.	1.5	0.3	1.7	o:	1.3	1.0	1.0	61	1.8	1.8	0:	01 81	10	9	1.5	1.8	0:	1.6	1.0	1.5	1.6	1.3	1.0	1.5	
	61			Буеппсы Сіды.	·	12	1	**	8	es	7	12	-	u	ß	6	e	<b>-</b>	-	*	4	-	4	4	*	-	7	7	
	15	TLTS.		Count-Work Product.	0722	1957	2130	2240	2083	2147	2273	2185	2332	1983	2016	2756	2503	2353	3000	2704	2432	:	2340	2181	2342	2087	0203	3020	
COLLON.	50	YANN TEST REBULIS.	Ballistic.	Work of Rup- ture (inch-lb.)	112.8	80.3	101.1	114.0	102.0	109.0	138.6	100.8	170.2	121.6	98.8	201.2	162.2	114.8	212.8	174.0	123.2	:	8.191	133.8	148.2	207.4	179.2	186.8	
	120	Yary 7	ř	Counts Actual.	20.5	7.75	20.4	10.7	20.3	10.7	10.4	10.0	13.7	16.3	20.4	13.7	16.0	20.3	14.1	10.0	19.0	:	14.2	10.3	15.8	14,4	16,4	10.2	
FOR KALAGIN	18			Count-Strength Product.	1454	1321	1034	1320	1085	1974	1230	1215	1093	043	090	1450	1335	1261	1469	1103	1436	1260	1040	110	1149	1124	1405	1214	,
KAL	13		LEA.	Strength (lb.)	13.8	55.5	31.0	67.1	33.7	63.7	70.8	7 10	2.8.2	58.6	47.3	05.1	81.9	61.5	02.7	87.7	72.8	8.00	76.0	56.6	71.8	0.10	86.7	91.2	
FOR	10			Counts Actual.	10.7	8.8	20.3	19.8	20.2	0.00	10.1	10.7	14.0	10.1	20.3	13.8	10.3	20.5	14.3	16.0	20.0	11.8	13.8	10.1	10.0	14.1	10.3	10.0	
ĽS	16			Turns per inch.	17.08	19.73	17.98	20.23	17.08	20.23	13.07	17.08	14.08	15.07	10.26	14.08	15.97	10.26	14.08	15.97	19.26	13.92	14.08	15.97	16.07	14.98	15.07	16.97	1
ESU		LARN.		Dials.	4.90	5.95	88	35	13	2	=	1	==	88	80	5.11 1	5.05 1	6.10	5.31	0.03	6	4.00	6.24	5.33	33	5.26 1	5.10 1	5.21 1	
	13 14	Particulary.		oppude appeary of	- - -	. 5.	8100 5.	0820 5.	8300 5.	0800	8150 5.	8350 5	5. 0022	7800	8350 5.	8000 5.	8850 5.	9000	8350 5.		0100		7750 6.	2000 5.	5.	9000	0000	9650 6.	
IE		FRANK						¦		¦		_			-						-				_				1
NNING	<sup>22</sup>	RENG	, pood,	Front Roller S	196	170	101	100	160	190	182	160	190	180	160	210	108	182	202	104	104	502	102	178	188	8	108	930	
	=			Yatn Ureakage 100 spindles hour,	10	9	*	120	143	គ	हां .	88	801	130	=	81	13	ឥ	•	•	ដ	-	15	ç	٦	15	•	#   	•
S	ន	OES.		Totul Los.†	27.3	:	20.4	<u> </u>	33.3	:	30.5	:	35.2	:	:	39.5	:	:		:	:	37.8	:	:	:	24.8	:	<u>:</u>	ı
Table 13.—SPI	٥	Waste Percentages		Spinuing Loss.	0.0	<u>:</u>	0.0	:	0.8	:	6.3	:	9,	:	:	<u>:</u>	:	:	: :	<u>:</u>	:	*. •	:	:	<u>:</u>	0.3	:	<u>:</u>	
[ab]	•	STE Pr	•5	Card Room Loss	10.5	:	5.5	<u>: </u>	16.2	<u>:</u>	#:	:	19.8	:	<u>-</u>	10.8	:	:	8:	:	:	24.1	:	:	:	13.5	:	<u>:</u>	
	٠	F	*8	Blow Room Los	18.3	:	15.3	:	윊	:	18.3	:	13.8	:	<u> </u> :	15.6	:	:	10.0	:	:	17.8	:	:	:	15.7	:	:	
,		•	edi ,el	Weight of Samp	91	•	2		œ.		2		ឧ			2		_	2			ន				2			
	100		'1	Counts Nomina	20.1	₹;	10.	ည္က	10.	98	16.1	100	Ŧ.	197	Ę,	#	16.	8	#	16A	69	일	#	16A	163	#	16A	16B	
,	#		,	Date of Splaning.	14-6-30	14-6-30	14-8-31	14-8-31	23-8-22	23-8-32	25-8-83 88-8-83	23-8-33	30-0-31	13-0-3	29-C-34	19-7-35	20-7-35	18-7-35	22-8-26 30	3.5 9-3¢	21-8-30	20-7-37	9-7-37	12-7-37	19-7-37	14-7-38	13-7-38	13-7-38	
				Sea con.	1929-30	1920-30	1930-31	1930-31	1931-32	1031-32	1932-33	1032-33	1933-34	1933-34	1933-34	1934-35	1934-35	1034-35	1935-36	1035-36	1935-36	1930-37	1036-37	1936-37	1936-37	1937-38	1037-38	1037-38	
	e:		, ,	Cotton.	Kalagin	-:1	Kalagin	Kalagin						:	_	:	Kalagin	Kalagin	Kalagin	Kalagin			Kalagin	Kalagin	Kalagin	Kalagin	Kalagin	Kalagia	
•	-	٠,		Sample No.	757	757	1155	1155		1	1888	1			ī			_					_	3606				4137	

• Diameter of rings—11".

The is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample under mill conditions it would be less than shown here.

### 14,-KADI-VIRAMGAM COTTON.

These samples have been very kindly supplied by the East India Cotton Association inspection and approval by their Standards Committee, in accordance with an agement made with the Association to supply to the Technological Laboratory, for ng, samples of fair average cotton of the commercial crop.

Sample No.	Colton.	Place.		Season.
727	 Kadi-Viramgam	Kadi		1929-30.
1161	 "	,,		1930-31.
1430	 ,,	Jotana		1931-32.
1887	 •,	Kadi		1932-33.
2459	 ,,	Viramgam		1933-34.
3326	 *,	,,		1935-36.
3588	 *9	Kadi		1936-37.
4136	 ,,	Viramgam	• •	1937-38.

### I. SPINNING TESTS.

### Treatment :--

- (a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once). Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
  1935-36 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

Spinning Master's Report :-

(a) Cotton:-

				Kadi-Vi	RANGAN.			
•	1020-30.	1930-31.	1931-32.	1032-33.	1933-34.	1935-36.	1930-37.	1937-38.
. :	Créams to creamy - white,		White to erramy- white	Creamy-white; brightish.	White to cream; - white.	White to cream; white; brightish.	White to creamy - white.	White.
·~_:::	Lenty	Leafy; slightly stained. Moderatoly	1	Very leafy. Good	id; lenfy.	A little stained;	Leafy. Fairly good.	Leafy; a triffe stained. Good.
& neppines		good. Well-guned.	j	Well-glaned.	Well-glaned.	A triffe knotted	Well-glaned.	Well-glaned.
	For too much	1.25% seeds	Considerable number of cut besides 1.1% glaned a n d	}	1.72% accils.	٠		A few glaned.
ver	Clean.	Fairly clean.	unginned. Clean.	Almost clean.	A little leafy.	Little leafy.	A little leafy.	A little leafy.
of iO flat	. Clear. ·	Even and nep-	Fairly good	Goo 1.	Good.	l'airly good.	Good.	A trific neppy.
	. 16 2 grams.	17.9 grams.	17.8 grams.	22, 6 grams.	26.7 grams	17.7 grams.	15.6 grams.	18,4 grams.
	rairly well- watered at the time of pressing	:1		Well-watered.		••		••

(b) Yarn :-

<i></i>				Kadi-V	ГВАМОУМ.			
, 	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1985-30.	1036-37.	1937-38.
 • <sub>.</sub>	Even	Fairly clean Fairly oven Somewhat neppy	Fairly even Fairly nep-free.	A triffe leafy :. Fairly even Free of nep Occasional slub	Fairly even. Fairly neppy.	}	Even in the	Almost clean. Even. Fairly free of nep.

Spinning Test Details and Results: - Sec Table 14 on page 42.

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OF THE STANDARDS COMMITTEE FOR KADI
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II.—REPORT
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							Клрг-Ушамбам.				
				1029-30.	1930-31.	1031-32.	1032-33.	1933-34.	1935-36.	1936-37.	1937-38.
Contract valued under	:	Ž1.	;	F. G. M. G. Broach	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	E. G. M. G. Broach F. G. M. G	F. G. M. G. Bronch Hedgo Contract No. 2.	F. C. M. G. Broach Hedge Contract No. 2, July/Aug. 1936 delivery.	F. G. M. G. Broach E Hedge Contract No. 2, April/May 1937 delivory.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. delivery.
Chass	:	:	:	Superfine.	Strict fine.	Fine.	Fino to superfine.	Fully good to fine.	Fine to superfine.	Fino.	Superfine.
Colour	:	:	:	Silvery.	Creamy-white.	White.	Creamy-white.	Dull-white.	White.	Dull-white.	White.
Staple Length	:	:	:	7/S inch.	Barely 7/8 inch.	Full 3/4 inch.	5 '8 inch.	Full 3 't inch.	3/4 inch.	11/16 inch.	3/4 inch.
Staple Strength	:	:	:	Fair.	Fair.	Fair.	Fair.	Fair.	Moderate.	Fair.	Fair.
Regularity	:	:	:	Foir.	Irregular.	Irregular.	Irregular.	Fair.	Fairly regular.	Regular but soft.	Regular.
Value above or below contract rate	contrac	t rate	:	Rs. 7 on.	Rs. 8 on.	Rs. t on.	Rs. 3 off.	Rs. 3 on.	Rs. 2 on.	Rs. 5 off.	Rs. 5 on.
Basis	:	:	:	Rs. 255.	Rs. 143.	Rs. 219.	<ul> <li>F. G. M. G. Broach F. G. M. G. Broach F. C. M. G. Broach F. G. M. G. Broach I. O. 2, July/Aug. Hodge Contract Hodge Contract 1933 delivery, No. 2, July / No. 2, April / No. 2, July / Rs. 207. livery, Rs. 226. livery, Rs. 228. Rs. 233. Rs. 162.</li> </ul>	F. G. M. G. Bronch Hedge Contract No. 2, July, August 1931 do- livery, Rs. 226.	F. G. M. G. Broach He dge Contract No. 2, July/ August 1936 de- livery, Rs. 228.	F. G. M. G. Broach Hedge Contract No. 2. A pril May 1937 delivery, Rs. 233.	F. G. M. G. Broach H odgo Contract No. 2, July/ August delivory, Rs. 162.
Date of Valuation	:	1,	,:	50- <del>1</del> -30	25-8-31.	17-8-32.	26-7-33.	13-8-34.	8.8.36.	23-4-37.	27-6-38.
Remarks	:	· :	:	This year poor cha- racter.	•	:	•	;	•	:	:

.—SPINNING TEST RESULTS FOR KADI-VIRAMGAM COTTON.	0 11 12 15 14 15 16 17 18 19 30 21 22 23 24 25 20 27		per pecd,	Year Door, 2004, 2014, 2	35 103 0.25 17.09 10.1 48.4 0.21 10.5 57.9 1,631	80 170 6 25 20 29 10 1 38 2 1,112 10 3 00.2 1,711 5 3.5 19.2 02	3 40 184 8,000 6,25 17,03 20,2 00,6 1,221 20 1 105.1 2,150 1 3.0 17.1 81	88 150 8,700 0.70 10.73 23.6 16.2 1,470 27.1 31.0 2,170 1 35 19 4 85 72 81	.3 21 183 8,000 5.09	47 154 8,450 5,05 10,75 27,5 50,5 1,142 23,8 51,2 2,218 5 2.8 19,0 69	.1 221 170 7,200 5.19 15.07 15.8 55.5 477 15.3 131 6 2.011 4 0.8 15.1 87	. 218 109 8,300 5,55 17.03 19.9 35.3 600 10.0 01.1 1,879 4 1.0 17.3 67 67 69	22 1131 2.00 6.03 17.03 20,4 01.1 1.293 20.8 112.9 2,310 3 4,5 17.1 85 77	170 0,300 5.33 19.73 23.7 54.1 1,242 24.1 04.0 2,362 1 4.0 19.8 81 77	153 0,600 0.07 23.11 20,7 37.2 1,103 29.8 76 9 2,250 3 4.0 23.1 81	20 202 8,400 5.10 14.09 13.0 85.3 1,180 111 170.2 2,100 4 1.6 11.5 86	. 12 103 8,400 5,81 15,07 10.4 01.6 17,010 10.3 130.8 2,182 4 2.0 15,4 86 71 70 70	.4 7 200 8,500 6,33 14.03 14.3 82.0 1,185 11.2 174.8 2,510 3 1.2 11.3 89 67 03	36 164 8,400 6.13 15.07 16.7, 62.0 1,050 16.5 132.0 2,178 4 1.5 13.8 50 60	16 105 10,200 5,83 10.20 10.0 01.4 1,222 10.6 100.2 2,110 6 1,2 18,3 89 60	0 30 221 0,000 5.33 14.08 14.3 104.7 1,107 14.2 206.2 2,028 3 0.6 14.3 83	6 200 0,000 6.33 15.07 10.2 88.0 1.110 15.8 151.4 0.72 4 0.4 15.3 x7 7x	0 208 0,700 6.11 10.07 10.0 19.0 1,582 15.0 181.0 2.0.8 1 0.4 10.3 16.5
AM	10	Y CRV		Counts tetual		٤.	1 02		=		12	=	â				ä ä	=	ä	ġ —	=		
AMG	81			Count-Strength Product	2	1,115	1.2.1	1.070	1,291	77	ļ ļ;	CCO	1,293	Ş	1,165	1,180		1,185	1,050	<u> </u>	<u> </u>	_	
I-VIR	17		LEA	6 edl) ilgasıld	+ 8+					50.3		97.3	9.1	54.1	55 61		53.0	6.59	65.0	g.,	104.7	88.0	0.60
KAD	16			Counts Actual	19.1	19 1	20.02	23.6	10.5	9.5		19.4	30, 4	33.7	89.1 13.1	13.0	16.4	14.3	16.7	10.0	<u> </u>	<u>=</u>	
FOR	13			Turns per luch.	17.09		17.03	10.73	17.08	10.73	15.07	17.03	17.03	19.73	13.11	14.03	16.20	14.03	15.07		11.98	15.07	16.07
ILTS	#	CULARS.		Draft.	6.23			0.70	5,03	5.05	5.13	5.55	5.03	5.33	0.07	5.10		6.33			<u> </u>	_	
RESU	13	VE Purt	K 4	Spludle Speed, R	:	:	000'8	8,700	8,000	8,430	7,509	8,300	009'6	9,30	009*0	8,400	10,100	8,500	8,400	10,200	000'6	0,000	0,700
EST	2	lino Fra	pood.	Front Roller S.	103	071	184	150	193	124	Ę.	108	108	2	155	8	105	96	101	101	<u> </u>	<u>0</u>	203
E 5	Ħ		rəq rəq	FIDURE ANY I	23	89	05	88	11	44	161	218	햧	ន	톍	61	# 6	-	8	2	ន	9	•
NNI	10	40ES.		f.eso.I latoT	31.8	:	23.3	:	28.3	:	24.1	:	30.3	:	:	21.6	::	13.3	:	:	11.0	:	:
-SPI	•	Percentages.		Splaning Loss.	0.7	:	9.	:	0.0	:	0.6	:	0.6	:	:		::	8	:	:	5	:	:
14	90	WASTE P		Cuttl Room Loss	9.8	:	10.2	:	5.	:	13.1	:	14.7	:	:	<u>:</u>	::	8	:	:	ğ	:	:
Table 14	*	<u> </u>		Blow Room Loss.	12.7	:	17	:	17.7	:	11.9	:	17.8	:	:	10.3	: :	13.7	:	:	11.6	:	:
La	•		(lbs)	ofgmas to MajoW	10		2		•		10		10			2		R			ន		
	ف			lenimoZ stanoj	20.1	ည ရွ	20 A	5	70Z	8	10 A	20 A	₹02	33	8	7	16 A 20 B	7	10.1	8	77	10 7	16 B
	4			Date of Spinulng.	8-8-30	8-8-30	1-0-31	1-0-31	22-8-33	25-8-32	23-8-33	-8-33	21-8-34	22-8-31	8) 2 2	21-8-30	21-8-30	30-4-37	30-4-37	29-1-37		12-7-38	12-7-38
-	**			Brason	1929-30	1920-30	1930-31	1030-31	1031-32	1931,-92	1932-33	1932-33	1033-34	1033-34	1033-34	1036-30	1935-36	1030-37	1030-37	1930-37		86-700	1037-38
•	eı			Cotton.	Kadi-Viramgan. 1929-30	Kadl-Vıramgam.	Kadı-Virəmgam	Kadl-Virangam.	Kadl-Viramgam.	Kadi-Virangam.	Kadl-Vlramgam. 1	Kadi-Viramgam.		_	Kadi-Virangam. 1		Kadl-Viramgam.	Kadi-Viramgam, 19		Kadl-Viromgam.	Kadi-Viramgam. 1937-38	Kadi-Viramgam., 1937-38	Kadl-Viranigam. 71037-38
		.		Sample No.	727	727	1161	11011	1430	1430	1887	1887			2100		3326 B	3388		3388		4136 X	<u>  4</u>

\* The ring frame fronk-roller would in the spinning of the seyarrs has a dameter of 1 lach. The dismeter of rings—11.

I is to be noted that the total loss is for a small sample weighing 10 lbs. or theresbook; for bulk sample spun under mill conditions it would be less than rhown here.

### 15.—WESTERNS COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
795	Westerns	Bellary	1929-30.
1127	Westerns	Adoni,	1930-31.
1370	Westerns	Adoni.	1931-32.
1889	Westerns	Raichur.	1932-33.
2356	Westerns	Adoni	1933-34.
2838	Westerns	Raichur,	1934-35.
3398	Westerns	Adoni,	1935-36.
3635	Westerns	Adoni.	1936-37.
4193	Westerns Jhavari	Raichur,	1937–38.

### I.—Spinning Tests.

### 1. Treatment:

(a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. I.

1934-35 onwards:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. I possesses a band drive arrangement.

### 2. Spinning Master's Report:—

(a) Cotton:-

						Wist	erns.			
_	-		1930-31.	1931-32.	1932-33.	1933-34.	1994-95,	1935-30,	1936-37.	1937-38.
Colour	••		Creamy-white.	Creamy-white.	Creamy-white.	Creamy-white.	Dull creamy	Creamy-white ; dullish.	Creamy-white to white.	Creamy-white,
Cleanliness	••		Leafy; rather badly stained.	stained.	i icary.	i .	Badly stained;	l stained.	Leafy Fairly good	Very leafy.
Feel Ginning and	 I neppi			Softleh Well-ginned	Somewhat	Good Well-glaned	1	A triffe knotted		
Seeds	••	••		0.7% ginned and unginned.	, ,,	1% full clean.			Canal Linder	T ander
Card Sliver Card Web	••		1	ł	\$		Tairly clean A little neppy.			Good: quit
	 Natet						22.5 grams			
Remarks			ĺ	••	<b></b>	٠٠ ا	••	1141	••	

### (b) Yarn :--

-				West	rne.	•		
* 350 mm + 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1	1030-31.	1031-32,	1932-33,	1933-31.	1931-35.	1935-80.	1930–37.	1937-38.
Evenness	Fairly clean Fairly even Neppy	Even	Fairly even	l'airly even Somewhat	1	l'airly even Somewhat	}	Even.

3. Spinning Test Details and Results :- See Table 15 on page 45.



					4	-1					
	1937–38.	F. G. M. G. Bronch Hedgo Contract No. 2, July/Aug. 1038 delivery.	ine.	Brownish white.	inch.			ou.	. G. M. G. Broach Hedgo Contract No. 2, July/Aug. 1938 delivory, Rs. 144.		:
			Superfine.	Brown	11/16 inch.	Fair.	. Fair.	Rs. 15 on.	Broach F. G. M. G. ontract Hodgo No. 9, J. olivory, 1938	9-8-38.	
	77.	Broach F. G. M. G. Sontract Fedge No. 2, J. 1038 deliv	:		·	:		:	Broach Zontraci oril/May Jolivory	:	
	1036-37,	Broach, F. G. M. G. Broach, Contract Hedgo Contract rd/May No. 2, April/May rry. 1937 delivery.	Superfine	Brownish white	13/16 inch	. Good	Fairly regular	Rs. 30 on .	Broach F. G. M. G. Broach F. ontract Hodgo Contract H. Nay No. 2, April/May livery, 18s. 231. dollvery, 1	20-3-37	:
		G. M. G. Broach I Hodge Contract No. 2, April/May-					:		F. G. M. G. Broach F. Hedge Contract No. 2, April/May 1937, delivery, Rs. 219.		
	1935–36,	0 5.9	:	Creamy brown	inch	:	ılar ::	: :	ರಕ್ಷರ	:	:
		_ 🔄	Fine	Cream.	11/16 inch	Poor	Irrogular	Rs. 10 off	Broach F. G. M. G. Contract Hedge Iy/Aug. No. 2, A elivery, 1937 Rs. 219.	,, 6-10-36	
	1034-35.		:	:		:	:		032	:	:
Westerns.	103		Fino	Brownish	13/16 inch	Moderate	Fair	Rs. 30 on	. G. M. Hedge No. 2, 1935 Rs. 23	20-8-33	· 
WEST	=	Broach Contract July/Aug.				:			Broach Jontract ly/Aug. lelivory.		
	1933-31	÷.	y good .	Brownish white	inch		Irregular	:	F. G. M. G. Broach F. Hedgo Contract No. 2, July/Aug. 1034 delivery. Rs. 208.	-31	:
	ÌÌ		d Full	Brov	3/4 inch	Fair	Irreg	Par	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	19-6-34	
:	1032–33.	E A	ully goo	:	:	:	:	:	Brou July/Au delive	:	:
	1935	r, G. M. G. Broach F.G.M.G. Bro No. 2. July/4. 1933 delivery.	Good to Fully good Fully good	Brownish-dull white. Brownish	5/8 inch	Fair	Irregular	Rs. 5 off	I. F.G.M.G. Broach F. G. M. G. No. 2, July/Aug. Hedge No. 2, July/Aug. 1933 delivery No. 2, July/Aug. Rs. 207. Rs. 208.	26-7-33	
	8	Broach		l white.		:	:-			:	
	1931–32.	. 2. G.	rfine	nish-dul	inch	:	ılar	· wo	591	:	:
		ch F. G	Superfine	Brow	3/4 i	Weak	Irrogular	Bs. 8	- B	: 	<del>_</del>
	1930-31.	4. Bros						-	:	:	nixed wit
	1930	F. G. M. G. Broach F. (	Suporfine	Yollowish	Full 3/4 inch	Fairly good	Irregular	Valued abovo or below Contract rate Rs. 10 on	. 177	14-7-31	• • Probably mixed with Mungari.
		:	<u>.</u>	:	_ <u>&amp;</u> :	:	<u> </u>	: #	Re. 177		:
		:	:	:	:	:	:	ct rate	:	:	:
	ì	: H	:	:	:	:	;	, Contra	:	:	:
	1	ned unde	:	:	:	; .e	:	or below	:	tion	:
		Contract valued under	. :	:	Staple Length	Staple Strength	Regularity	abovo	:	Date of Valuation	rks
1		Contr	Class	Colour	Staplo	Staple	Regula	Valued	Basis	Date e	Remarks

II.—REPORT OF THE STANDARDS COMMITTEE FOR WESTERNS.

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Table 15.—SPINNING TEST RESULTS FOR WESTERNS.

HVE DITY ).		Testing Room.	22	20	83	80	ξ.	82	12	67	8	33	8	1.2	칹	턴	ខ	70	8	ş	8	99	. 22	57	7.
RELATIVE HOMBITY (%).		Spinning Room,	92	ני	12	92	8	22	63	69	78	80	80	15	13	20	90	5	8	20	69	89	7.1	73	73
TEMPER- ATURE (°F.)		Spinning Room.	98	87	88	87	SG	98	88	87	98	98	8.5	13	98	85	80	88	87	06	06	80	98	98	87
	Jank	Turns per inch Ac	17.0	19.3	10.9	18.7	17.3	19.3	15.3	17.2	15.4	17.3	18.4	15.4	17.0	18.3	15.4	17.1	18.7	15.3	17.3	18.5	15.3	17.1	18.2
		Neps per yard.	10.7	11.5	8.0	8.5	un ei	3.0	61	9.0	13	0.5	5.5	1.8	ei ei	2.0	3.5	2.0	2.5	1.2	1.3	1.8	1.0	8.0	1.0
		Evenness Class.	7	-	4	כו	es	7	4	כו	4	13	4	es	6	8	က	4	7	69	4	7	m	₩	#
CES.		Count-Work Product,	1884	2081	2312	2236	2490	2348	2125	2001	2111	2013	2108	2023	2597	2629	9947	2200	2250	2138	25.22	2300	2008	2368	2420
Test Results	Ballistio.	Vork of Rupture (inea-lo.)	94.2	107.8	115.0	92.0	120.4	101.2	132.0	103.0	133.6	102.0	107.0	183.0	129.2	127.0	136.2	111.4	109.2	161.4	107.8	111.0	102.0	117.8	121.0
YARN TI	, A	Counts Actual.	20.0	19.3	20.0	24.3	19.7	23.2	10.1	20 3	15.8	19.0	19.7	16.0	20.1	20.0	16.5	19.8	20.6	16.1.	20.8	20.0	10.1	20.1	20.0
		Count-Strength Product.	806	1287	1339	1232	1202	1331	1183	1102	1141	1095	1204	1704	1512	1024	1330	1300	1466	1485	1258	1451	1551	1300	1504
	LEA.	Strength lbs.	1.61	7.90	0.00	52.0	77.77	59.0	74.4	55.4	71.3	55.3	60.3	107.2	55	70.2	80.0	0.00	72.2	61.9	59.3	69.0	94.5	68.0	78.0
		Counts Actual.	19.0	19.3	20.1	7. 83	19.4	23.1	15.0	19.9	16.0	10.8	30.0	15.0	20.1	20.5	16.5	19.7	20.3	15.6	20.7	20.0	10.1	20.3	19.9
	Draft,			20.23	17.98	19,73	17.08	19.73	15.07	17.98	15.07	17.08	19.26	15.97	17.98	19.26	15.97	17.08	10.26	15.07	17.08	19.36	13.97	17.98	10.26
ULARS.*	Spladle Speed, R. P. M.		 Si	5.33	5.42	6.45	5.57	6.58	5.33	5.55	5.03	5.08	5.98	2.80	5.93	6.07	5.71	6.83	5.93	5.34	5.93	5.03	6.39	5.81	5.81
E PARTIC	.r.a.	Spludle Speed, R	:	:	9450	8200	9200	0200	0008	8800	8250	8550	0800	8800	8550	0000	8200	0006	10350	8700	9200	10200	0008	9000	10300
RING FRANE PARTICULARS.	'paadg	Front Roller R. P. M.	176	ğ	190	150	104	176	181	178	102	175	188	108	179	185	104	181	197	200	197	196	203	193	108
		Yarn Breakages of 194 solbuigs	8	8	8	\$	8	Œ	23	151	및	109	114	18	ខ្ល	2	0	<b>1</b> 3	2	<b>5</b>	91	2	21	91	8
· s		Total Loss. †	24.7	:	20.7	:	10.7	:	21.5	:	95.6	:	:	81	:	:	21.8	:	:	21.9	:	:	61 61	:	:
SNTAGE		spinning Loss.	0.7	:	4.0	:	0.6	:	0.1	:	0.5	:	:	.0	:	:	3	:	:	6.3	:	:	0.	:	
Waste Percentages.		Card Room Loss.	11.9	:	10.8		0.0	:	10.8	:	13.0	:	:	12.7	;	:	10.5	:	:	10.8	;	:	11.1	···:	:
Wast	-	Blow Room Loss.	13.0	  :	10.8		11.9	:	15.0	:	14.1	:	:	10.8	:	:	12.5	:	:	13.1	:	:	13.1	·:	
	edi ,	Welght of Sample	10		97		92		2		10			9			10			22		Ì	9		
		Counts Kominal,	20.1	20B	20.1	54	20.4	54	91	20A	16	- Y07	20B	10	70%	20B	10	20A	20B	16	20.1	201	16	20A	2013
		ding.	24-7-30	24-7-30	24-7-31	25-7-31	23-0-32	23-0-32	1-0-33	31-8-33	20-0-34	2S-0-34	28-0-34	31-9-35	30-8-35	31-8-35	14-10-30	11-10-36	14-10-30	28-5-87	29-5-37	29-5-37	20-S-3S	18-8-38	18-8-38
		Date of Spluning.	15	귱		25							!									_			
	•	Season.	1920-30	1029-30	1930-31	1930-31	1931-32	1931-32	1032-33	1932-33	1933-34	1933-34	1933-34	1931-35	1034-35	1034-35	1935-36	1035-30	1935-36	1030-37	1936-37	1036-37	1937-38	1037-38	1937-38
	•	Cotton.	Westerns	Westerns	Westerns	Westerna	Westerns	Westerna	Westerns	Westerns	Westerns	Westerns	Westerns	Westerns											
•				705	1127	1127	1370	1370	1880	1880	2350	2350	2356	2838	2838	2838	3308	3308	3308	3035	3035	3635	4103	4103	4103

\* Diameter of ting frame front roller—?. Diameter of rings—11?.

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

### 16.—FARM WESTERNS COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Collon.	Place.	Scason.
758	Farm Westerns	Guntakal	1929-30
1128	,,	Adoni	1930-31
1371	"	Bellary	1931-32
1890	99	Adoni	1932-33
2297	"	Bellary	1933-34
2772	,,	$\Lambda$ doni	1934-35
3323	,,	Raichur	1935-36
3654	"	Guntakal	1936-37

I.—SPINNING TESTS.

### 1. Treatment:-

- (a) Blow-room.—Upto 1933-34:—Poreupine, Crighton (twice), Hopper, Scutcher (3 times). 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
  1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:-

		1				l'arn W	TSTERNS.			
_	•		1929-30.	1930-31,	1031-32.	1932-33.	1033-34	1931-35.	1935-36	1936-37.
Colour		-	Creamy	Creamy-white .	Creamy-white .	Creamy-white .	creamy-white;	Creamy-white ; fairly bright	Creamy-white .	Creamy-white,
Hearliness		. ]	Very leafy .	Leafy	Leafy; a good	Stained; leafy.	fairly bright. Leafy	Leafy	Leafy (fine leaf);	Leafy.
řeel		[		Good	deal stained Good softish	Good	Good	bood	stained Good	Good.
Ginning and	beppir	ėss	Fairly well-	Well-ginned	Well-ginned	Somewhat	Well-ginned	Well-ginned	l A little knotted.	
Beeds		••			1.4% ginned and ungin- ned		ned and full	many full		Ginnel 0.863
Card sliver			Fairly elean	Slightly leafy.	A little leafy	Clean ., .	elean. L'akiy elean	clean. Leafy	Almost elean	A little leafy.
Card web				Even and al-	Cood	Good	Good even	Full	Good	Good.
Weight of 10	flat st	ips.	16.4 grams	most nep-fres. 18 7 grams	16.0 grams	18.5 grams .	16.3 gmms	25.1 grams	15.1 grams	16,2 grams.
Remarks	••	••	Much leaf shed over beam and ring rails.	Fully pressed.						

### (b) Yarn :--

		1				TARM W	PSTERKS.		•	
		_	1929-30.	1030-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36-	1936-37.
Cleanliness Evenness Neppiness	:	٠.	Even	Fairly uneven .	l	l'airly even	J		Lien	Leafy., Even. Practically non- free.
Slubbiness	••	••	٠.					'		

3. Spinning Test Details and Results: - Sec Table 16 on page 48.

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STERNS
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THE STANDARDS COMMI
OF 1
II.—REPORT OF THE STANDARDS COMMI

Arre						Fann Westerns.	Tenns.			
			1929-30.	1030.31.	1931-32.	1932-33.	1933-34.	1034-35.	1935-36.	1936-37.
Contract valued under	:	:	F. G. M. G. Broach. F. G. M. G. Broa	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	nch F. G. M. G. Broach F. G. M. G. M. G. Broach F. G. M. G. M. G. Broach F. G. M. G. M. G. M. G. Broach F. G. M. G. M. G. Broach F. G. M.	F. G. M. G. Broach April/May 1931 delivery.	F. G. M. G. Broach, Hodgo Contract No. 2, July/Aug. 1935 delivory.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1936 delivery.	7. G. M. G. Broach Hedge Contract No. 2. July/Aug. 1937 delivery.
Class	:	:	Extra superfine	Extra superfine	Superfine	Fully good to fine . Suporfine	:	Superfine	Fully good to fins	Suporfine.
Colour	:	:	White	Creamy-white	Brownish-white	Brownish	Whitish	Creamy-white	Dull white	White.
Staple Length	:	:	4 inch	Full & inch	4 inch	Z inch	a inch	. 34 inch	1 inch	13 inch.
Staple Strength	:	;	Good	Strong	Good	Good	Good	Fairly good	Moderate	Fair.
Regularity	:	:	Regular	Regular	Regular	Regular	Rogular	Regular	Slightly irregular Regular.	Regular.
Value above or below contract rate	et rate		Rs. 45 on	Rs. 50 on	Rs. 30 on	Rs. 25 on	Rs. 40 on	Rs. 65 on	Rs. 15 off	R. 30 on.
Basis	:	:	Rs. 242	Rs. 177	Rs. 152	F. G. M. G. Broach	F. G. M. G. Broach	F. G. M. G. Broach	F. G. M. G. Broach	F. G. M. G. Broach
				٠		1933 delivery, delivery, Rs. 187, No. 2, July/Aug. No. 2, July/Aug. No. 3, July/Aug. 1935. 207. delivery, 1835. delivery, Rs. 298. Rs. 298. Rs. 298. Rs. 239.	delivery, Rs. 187.	No. 2, July/Aug. 1935 delivery, Rs. 229.	No. 2, July/Aug. 1936 delivery, Re. 228.	No. 2, July/Aug. 1937 delivery, Ra. 239.
Date of Valuation	:	:	6-6-30	14-7-31	13-6-39	26-7-33	3.5.34	2-7-35	8-8-36	3-6-37.
Remarks	:	:	:	:	:	:	:	:	:	:
	1	1								

Table 16.—SPINNING TEST RESULTS FOR FARM WESTERNS COTTON.

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,		1		;		,			t		1			1			ı			,		1	ì
20 20	(°.)	Tresting Boom.	<u>۾</u> 	ē	? 	'â { -	-	7.	5	·			ا د	12	7	₹ 	12	7.	ï-	S	22	ī. 	
ត 🖥	E C	-१४००श श्रुवासाद्य	Š	٤	13	۶.	5	11	8	٤	7.	G	5	22	<i>ا</i> د	i:	ï	£;	1.	5.	3	3	
35 1 ENPT 12-1	ATTRE ('F')	moog Papaqds,	90	003	3	5	9	7	5	ĩ	£	â	;	08	2	?	IJ	92	2	2	16	8	
a		lutas per lash Actual	17.1	19 0	17.3	2	17.4	19.3	15,2	19,0	17.3	10.1	21.1	17.0	18.3	91.0	15.2	17.3	18.7	13,5	17.5	19.3	
ត		Sept per 3 and	17	- -	13		0.5	0.5	1.5	1.8	77	1.5		::	17	1.9	21 21	si si	2	6.0	17	6.0	
<b>1</b>		Permines ( lass	۲-	7	-	-	- <i>-</i>	~ ~	-	<b>+</b>	-	<del>-</del>	13		-	.,	_	-	-	63	·	-	
ត	HF-CTT4	Lia W Into 1 Inulari	- Let 1	7942	1977	372	125	7	151	207	2637	2570	2760	9052	2659	152	2100	7	:de:	2014	2623	2107	
۶,	JIST HES	do tro#	121	0.5.0	104 2	9.1		118.6	111.2	0.0	13.3	10g.2	81.4	1,15,0	113.6	69.0	125.2	112.0	113.6	109.2	138.0	100°H	
2	YIII	lauts/ etuno )	10 7	23.0	B 0%	6	_ ទ	7	30.0	5	1.0	7	30.3	0.02	23.4	3	19,1	50.4	20.7	15.4	19.0	23.2	
22		dign vid-igno') finbord	1612	147.2	1315	<u>:</u>	1703	1626	1200	107.	IGS	1017	1435	171	1001	1109	1403	1317	1478	1764	136	555	 
=		(adi) disante	4.5	¥ 10	0.10	5 55	a.	70.7	6.8	5.3	99.23	6.89	10.3	0.5	0.00	27.75	93.8	e! 3	6. 55	113.1	3 53	8.8	of rings 18
10		Counts totund	10 01	£8	9 05	9 6	19 6	33.0	8.01	ž.	20.02	23.5	1.63	19.9	23.8	199	15.0	10.0	20.0	15.6	19.3	13.4	Diameter
12		Turns per inch	17.08	19.73	17.94	10.73	17.09	10.73	17.98	19.73	17.08	10.73	21.80	17.08	10.73	£.	17.07	17.08	19.26	15.07	17.08	19.73	roller-1".
11	IRFICI LARS	חביונו.	06 7	28 2	2 20	6 10	7	6.41	5.68	5.05	5.03	5.33	0.63	6.10	÷.:	0.80 0.80	5.65	6.07	0.10	5.50	1.71	5.03	front rolls
13	Ã	Spindle Speed, R P M.	:	:	9130	8700	0200	9200	0058	2003	07.20	9300	0200	9750	900	0200	8,700	0220	10601	8100	0004	0000	ring frame
1	RING FRINE	Front Roller Speed	106	170	190	150	ĕ	13	173	162	198	180	130	198 198	180	55	193	186	961	201	192	27.	Inmeter of r
11		Yarp Breshages per 100 spindles per hour.	12	<b>:</b>	Di:	7.0	ä	21	3	166	2	6	8	2	61	ន	81	ឥ	13	9	10	=	. Dia
70	8301	† read Later	1.5	:	9.00	:	8	:	21	:	0.0	:	:	9.19	:	:	30.4	:	;	2.5	:	:	
6	RCENT	Spinning Loss.	9		0.3	:	0.5	:	6	:	0.3	:	:	0.4	:	:	6.0	:	:	0.3	:	:	
m	Waste Pri	Carl Room Loss.	,	:	11.1	:	8.7	:	10.5	:	9.3	:	:	13,1	:	:	1:0	:	:	10.0	:	:	
-	17.6	Blow Boun Loss.	5	ì, :	10.5	:	19.3	:	13.8	:	51	:	:	7	:	:	11.0	:	:	.: ::	:	:	
•		Weight of Sample, (lbs.)	:	3	] =		9		٤		S	_		2			2			2		_	
13		Counts Forminal	,	3 1	08	- <del>-</del>	្ត	₹	\$	3	S S	7.	8	ន	हाँ	8	2	207	90 E	2	ន	22	
4		Date of Spinning	1	14-6-30	24-7-31	27-7-31	27-6-33	23-0-32	21-8-33	31-9-33	22-5-34	22-5-34	23-5-34	18-7-81	10-7-35	10-7-35	20-8-3¢	10-8-36	10-8-36	11-6-37	12-0-37	12-0-21	
~		Sm30n.	-	1920-30	. –						1033-34	1933-34 2	1037-34 20	_					1033-36 10				
e		Catton. Sm		Farm Westerns, 1929–30 Farm Westerns 1929–30	Farm Westerns, 1630-31	Farm Western* 1930-31	Parm Westerns (1931-32	Farm Westerns. 1	Form Westerns [1932-33	Tarm Westerns, 11	l'arm Westerns 11		Farm Westerns 11	Farm Westerns 1934-35	Farm Westerns, 1934-35	Гата Westerns 1934-35	Farm Westerns. 1935-30	Farm Westerns 1935-36	Farm Westerns 11	Farm Westerns 1936-37	Farm Westerns. 1936-37	Farm Westerns. 1936–37	
-	• {	Sumple No.		857	1198		1		1495		2287	1055	1 220	2772	2772	61	3363	3323	3323	3654		3024	

• Dameter of thay the local loss in for a small example vergaling 10 lbs.; If bulk sample span under will conditions it would be less than shown here.

### 17.—KUMPTA COTTON.

These samples have been very kindly supplied by the East India Cotton Associafter inspection and approval by their Standards Committee, in accordance with an ement made with the Association to supply to the Tcchnological Laboratory, for , samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
1129	Kumpta	Hubli	1930-31
1369	"	5*	1931–32
1891	"	**	1932-33
2298	**	Gadag.	1933-34
2872	"	,,	1934–35
3399	,,	Hubli.	1935-36
3698	,,	**	1936-37
4258	,,	,,	1937–38

I.—Spinning Tests.

### reatment :--

Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter-Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

pinning Master's Report :--

### ) Cotton:—

_			·		Kox	IPTA.			
		1030-31.	1931-82.	1932–33.	1933-84.	1934-35.	1935-36.	1936–37.	1937–38
••	••	Dullish creamy	Dullish creamy- white.	Dullish ereamy- white,	Creamy-white.	Creamy-white.	creamy-white:	Creamy-white,	White to creamy white.
s		Leafy	Leafy	Very leafy;	Lenfy	Very leafy	duilish. Leafy; slightly stained.	Leafy	Very leafy.
ınd	neppi-	Moderately good	Well-ginned	Good	Good smooth A triffe knotted.	Good Well-ginned	Good	Good bodied Well-ginned	Good. Fairly well- ginned.
••	••	Too much cut and crushed besides 1.1% glaned and unginned.	and unglaned	••	1.56% ungin- ned and part- ly glaned.	•		••	
ır		Fairly clean Even and practically		Almost clean Even and nep-free.	Fairly leafy Good	Glenn	Almost clean Even ; nep-free	A little lenfy Good ; fairly free of neps.	Leafy. Almost free of neps.
of :	10 fat	free of nep. 16.3 grams	14.3 grams	15.2 grams	16.2 grams	10.3 grams	14.3 grams	23.6 grams	15,8 grams.
• •		••		••	Fairly well- watered.	·· ·	••		

### ) Yarn :--

		·	,	Kt	impta.			
	1930-31.	1031-32.	1932-33.	1933-31.	1931-35.	1035-30.	1936-37.	1937–38.
			Free of nep	Fairly even in the two lower counts. A little neppy.	Lyon		Fairly even	Fairly clean. Even. Fairly free of nop.
· •••		•	••	A little slubby.		••	••	••

pinning Test Details and Results:—See Table 17 on page 51.

### II. REPORT OF THE STANDARDS COMMITTEE FOR KUMPTA COTTON.

				•		!	Krant.	rt t.				
			, si	1030-31.	1931-32.	1032-33.	1933-34.	1034.35.	1935-30.	1936-37.	1037.38.	
Contract valued under	:	:	F. G. M	f. G. Bronel	hF. G. M. G. Broac No. 2.	. F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. M. G. No. 2. No. 2. July/Aug. April/May 1931 Red. No. 2. July/Aug. April/May 1931 No. 2. April/May 1931 delivery. 1933 delivery.	F. G. M. G. Broach April May 1931 delivery.	F. G. M. G. Broach. Hedgo Contract No. 2, April/May 1930 delivery.	F. G. M. G. Broach F. Hedge Contract No. 2. April, May 1937 delivery.	Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Sollwell Hedge Contract Hodge Contract No. 2. April May No. 2. July/Aug- No. 2. April May No. 2. July/Aug- 1939 delivery.	f. G. M. G. Broach Hedge Contract No. 2, April/May 1939 delivery.	
Class	:	:	. Fine	:	Fine	Fully good	Fully good to fine.	Fino	Fino	Fine to superfine Fine.	ino.	
Colour	:	:	Browny yellow	•	. Brownish white	Brownish	Grayish and creamy Dull white		Greyra'i	Browniah	Gmy.	
Staple Length	:	:	Full 7/8 inch	•	. 7,8 inch	3/1 inch	Full 3/1 inch	13/16 inch	7/8 inch	13/16 inch	7,8 inch.	4217
Staple Strength	:	:	Good	:	Fair	Fair	Good	Good	Good	Good	Irregular.	
Regularity	:	:	Regular	:	Rather irregular .	Irregular	Regular I	Fairly regular	[rregular	Requiar	Irregular.	
Value above or below contract rate	ntraet	rato	Rs. 50 on	:	Rs. 25 on	Rs. 10 on	Rs. 22 on	114 50 cm	Rs. 50 on	R4. 22 on I	Rs. 22 on.	
Basis	:	:	Ra. 177	:	Rs. 162	T. G. M. G. Broach E. G. M. G. No. 2, July/Aug. Hedge Contract Hodge Contract Hedge Contract Hedge Contract Hodge Contract Hodge Contract Hedge Solvery, No. 2, April/May	F. G. M. G. Broach! Hedge Contract No. 2, April/May delivery, Rs. 192.	F. G. M. G. Broach Hedgo Contract No. 2, April/May 1936 delivery,	h E. G. M. G. Broach F. ( H. Hedgo Contract I I S. No. 2, April/May N. ( 1937 delivery, u	C. M. G. Broach! Hedge Contract No. 2, July/Mg-	Broach F. G. M. G. Broach Sontract Religion Contract living Contract living April/May felivery, 1939 delivery.	
Date of Valuation	· :	:	14-7-31	:	13-6-32	26.7.33	11.5.34	Rs. 197.	18s, 219,		긆	
Romarks	, ,::	:		:	:	:	:	;	:	:	:	

88 13

67 66 76 76 76

20 27 RELATIVE HUMINITY (%).

0.8 1.0

2093 2714 2615

23.2 117.0 s

1695

23.7

10.73 21.80

10300

12.2 10.2 0.0

28-0-38 20 28-0-88

20-0-38 30 A

1037-38 1037-38 1037-38

Kumpta .. 4258 |Kumpta ...

Kumpta ...

216 180

6.91 6.05 5.48

130.0

		ا					İ			- 1	İ			1		1			ĺ		
	띩	Trnper- Ature (°F.)		anooM yainnigE	85	98	06	87	87	30	88	89	83	88	88	88	87	80	83	83	83
	ëi		ctual.	Tuins per Inch. A	18.0	22.2	10.1	22.6	18.8	20.0	17.1	10.0	20.9	17.1	10.0	17.2	19.1	21.1	17.3	18.8	20.0
	83			Neps per yard.	1.7	3.0	1.5	2.0	0.5	1.0	1.2	1.8	1.6	1.2	1.2	1.3	1.5	1.5	1.2	1.6	1.6
	63 63			Evennesa Class.	4	ı.	89	4	-#	13	4	ıs	9	65	69		7	4	69	*	13
	ដ	Ts.		Count-Work Product.	1442	2308	1855	2395	2205	2923	2273	2343	2362	2500	9240	2332	5430	2468	3640	2520	2505
TON	23	Test Resours	Ballistic.	Work of Rupture (Inch—lb.)	103.0	82.4	0.70	81.2	0.40	76.4	111.4	97.2	77.3	197.5	100.0	110.0	105.2	86.0	134.0	104.8	87.8
CO	10	YARN T	"	Counts Actual.	23.7	20.1	23.4	29.5	24.1	29.1	20.4	24.1	30.0	20.2	23.3	20.1	23.1	28.7	10.7	24.1	30.0
KUMPTA COTTON.	18			Count-Strongth Product.	1577	1413	1525	1450	1375	1210	1527	1184	1228	1820	1753	1740	1692	1541	1693	1509	1391
KUN	11		LEA.	Grength (lbs.)	63.7	47.7	67.2	19.3	58.5	42.3	77.1	63.4	97	80.2	71.9	85.3	72.3	52.4	86.4	62.1	45.0
FOR	10			Counts Actual.	24.0	99.G	7.55	20.0	23.5	23.0	19.8	23.4	8.02	20.4	7.83	20.4	7.83	10.4	10.0	24.3	30.3
	15			Turns per inch.	19.73	23.11	19.73	23.28	19.73	21.86	17.08	19.73	21.86	17.98	19.73	17.08	19.73	21.86	17.08	10.73	21.80
RESULTS	#	Particulars.*		Draft.	5.03	7.00	6.77	7.11	6.63	£8.0	5.81	6.39	6.62	6,95	5.23	0.10	5,55	0.70	6.00	5.35	6.03
TEST I	13		.w.9	Spindle Speed B.	0000	9700	0650	9550	0000	0006	9050	9550	0016	9700	9630	0026	9700	9000	9600	9500	0000
	11	RING FRANE	Poods	Front Roller	180	163	180	153	178	150	861	180	164	107	176	104	178	241	for	174	168
SPINNING	ដ		100 IV.	Yarn Breakages po spludies per hou	ŧ	<b>ģ</b>	략	81	150	100	ដ	6	22	S	18	ឥ	97	17	16	9	ຣ
FI	10	gi		Total Loss.†	23.5	:	23.2	:	23.5	:	33.4	:	:	8	:	19.4	:	:	95.0	:	:
lí	0	ENTAGES.		Spinning Loss.	0.5	:	9.0	:	0.0	:	9.0	:	:	7.0	.:	7.0	:	:	0.5	:	:
Table 17	ø	WASTE PERCENT		Card Room Loss.	10.3	:	6.0	:	8.0	:	2.	:	:	13.8	:	19.7	:	:	13.8	:	:
Tab	2	WAS	-	Blow Room Loss.	14.1	:	5.0	:	15.0	:	14.7	:	:	20.0	:	1.0	:	:	12.5	:	:
	9	<u> </u>	(lba.)	Weight of Sample	2		g		ខ្ព		2			2		ន្ទ			유		
	ຜ			Counts Nominal.	12	30 B	7	30 II	72	30 A	្ត	 ::::::::::::::::::::::::::::::::	N 08	ន		្ត	<b>5</b> 1	30 V	St.	캶	30.1
				Date of Splining.	27-7-31	27-7-31	30-0-32	22-0-32	30-8-33	31-8-33	21-5-34	23-5-34	23-5-31	25-0-35	24-0-32	10-10-30	15-10-36	15-10-30	13-7-37	13-7-37	13-6-37
	. ຕຸ			Scason.	1030-31	1030-31	1931-32	1031-32	1932-33	1032-33	1033-34	1033-31	1933-34	1034-35	1031-35	1935-30	1035-30	1035-36	1036-37	1036-37	1936-37
	eı	-	<u>स्टेर्</u> सन्दर्भ	Cotton	Kumpta	Knmpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta	Kumpta
	, M		<del></del>	Sample No.	1120	1120	1300		1801	1301	2208	2208	8000	2872	2872	3300	3300	3300	3008		3008

t It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here. 

### 18.—UPLAND COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by the ir Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cottor.	,	Pluce.	Season,	Sample No.	Collon		Place,		Scaron,
796	Upland		Gadag	 1929~30	2475	Upland		Gadag	٠.	1933-34
1158	• •,		Hubli	 1930 - 31	2829	• ,,		11		1934-35
1396	**		Gadag	 1931-32	3325	••	٠.	**		1935-36
1884	44		••	 1932~33	3655	.,		,,,		1936-37

### I. SEINNING TESTS.

### 1. Treatment :-

- (a) Blow-room. -Upto 1933-34: -Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards;—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust. Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter. Rover and spun from single hank roving on Ring Frame No. 1.
  1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.
- 2. Spinning Muster's Report :-
  - (a) Cotton: -

					l'els'	<b></b>			
****		1029-33	1957 31	   1931-*1. 	1072-33.	1933-31.	1976-75.	1935-34	1926-77.
lour	•	Creams-white, bright	f're amy white.	Crestay-white	Ctramy white.	Creamy-white.	White to enumy white,	CEPRESS.	Hillin (
enlines .		Lrafy	Leafy; slightle stained.	nottewhate leaft.	lesty	Very leafy	l'airis elean	r-lichtis stain-d Fairly karp.	Fairly clean
rel		Good	٠.	freed articles	within	fired	sutt; pronteti	tioni	arited for it.
nning and		A little supped and knotted	Well glaned ex- cept for elight knottless.		Somewhat Inded in glaning		Well glaned	l triffe knatied	Well-glaned.
rds .,		A fair amount of undevelop- ed ecci. 0.63% full clean.	and unglu-	n.5°, ungland			-anne serale		
ard Sliver			Almost ch m .	Char	Clran	l Jenl)	('Iran; enft	tican	Ciran.
ard Web	·· •	A little cloud; and neppy.	Practically free of hep	lioni	Good	omewhat cloud).	lightly arppy	Good	i Good: Bri i free.
i cight of strips,	10 fts	1 20,8 grams	lei e grams,	23.7 grams	25.7 grains	26.4 grame	Prame	15,6 grame,	17.2 Stante.
Remarks		-							
<u> </u>	b) ]	7arn :-			UPLAN	D.			
		1929-30.	1930-31	1931-32	1932-31,	1933–31.	1931-35,	1975-86	1930-37.
Cleanijness		Fairly leafy .	. timost clean .	Almost clean	5 om e w h a t	Leafy	Clean	Almost clean	Slightly leafy.
Eventiess	••	Very neppy .	Pairly even	l'altis even	l'althy even	l'airly even	Fairly even	Even	Even.
Nepplaces	••	l'airly even	4 trifle neppy		1	Somewhat		Practically free	
Slubbiness		ł	1	1	1	neppy.		of nep.	of neps.

<sup>3.</sup> Spinning Test Details and Results :- See Table 18 on page 54.

II.—REPORT OF THE STANDARDS COMMITTEE FOR UPLAND COTTON.

							Ωar	Органд.			
			<u> </u>	1929-30.	1930-31.	1931–32.	1032-33.	1933-34.	103 1-35.	1935–36.	1936-37.
Contract valued under	:	:	:	?. G. M. G. Broach.	F. G. M. G. Broach. F. G. M. G. Broach. No. 2.	F. G. M. G. Broach F.	G. M. G. Broach No. 2, Aug-July. 1933 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April-May 1935 delwory.	Broach F. G. M. G. Broach Contract Hedge Contract pril-May 1036 delivery.	F. G. M. G. Hodgo C No. 2, Ju 1936 delive	Broach F. G. M. G. Broach contract Hodgo Contract ly-Aug. No. 2, July-Aug. ny. 1937 delivory.
Class	:	:	:	Strict fine	Fine	Fine	Fully good to fine.	Fine	Superfina	Superfine	Fino.
Colour	:	:	<u> </u>	Bluish white	White but slightly creamy.	Bluish white	Whitish	Whitish	Whitish	White	White.
Staple Length	:	:	:	7/8 inch	29/32 inch	Full 3/4 inch	11/16 inch	13/16 inch	3/4 inch	11/16 inch	11/16 inch.
Staple Strength	:	:	:	Good	·· poop ··	Fair	Fair	Good	Fair	Fair	Weak.
Regularity	:	:	:	Rogular	Regular	Regular	Irrogulae	Irregular	Fair	Somowhat irregular	Somowhat irrogular.
Value abovo or below contract rate	ontract	rato	:	Вя. 50 оп	Rs. 35 on	Rs. 20 on	Rs. 5 on	Rs. 5 off	Rs. 15 on	Rs. 7 off	Rs. 5 on.
Basis	:	:	:	F.G.M.G. Brouch Rs. 162	пя. 162	Rs. 160	F. G. M. G. Broach No. 2, July-Aug. 1933 dolivery. Rs. 207.	Broveh F. G. M. G. Bronch ly-Aug. Hedge Contract clivery. No. 2, April.May Rs. 22 I.	Bronch F. G. M. G. Bronch F. Glandrach Flodge Contract No. 2, July-Aug. 1935 delivery, 183, 221.	G. M. G. Hedge C No. 2, Ju 1936 d Rs. 228.	Bronch F. G. M. G. Bronch fontract Hedge Contract Iy.Aug. No. 2, July.Aug. olivery, Rs. 239, delivery,
Date of Valuation	:	:	<u> </u>	16-7-30	10-8-31	27-6-32	26-7-33	\$0.8.3‡	13-8-35	8-8-36	3-6-37.
Remarks	:	:	:	•	•	:	:	:	:	·	•

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	1 1		woon galanige	98	35	â	80	£ 52	83 84	8, 13	£ 32	90	8 8				
	j		}	Tutms, per	17.1	17.1	18.6	17.1	17.5	17.0	17.3	17.3	15,5	15.0			
	23		_	Neps Pet yard	9.6	ei d		0.61	3.0	3.8	8.1	1.2	1.3	0.0			
	60			Dy conness Class	n 4	<b>,</b>	7	<b>4</b> 17	47 10	<b>4</b> 13	4 13	7 7	67	m <b>7</b>			
	151	SULTS.		Count-Work Product.	2518	253	3411	2317	2177	168	2649	2730	3277	2561			
ľon.	90	Yan Test Brsuns.	DALLISTIC.	Work or Rupture (inch—lb.)	128 4		# gg	119.2	109.1	117.8	120.2	137.8	911.4	130.0			
COL	19	Yean		Counts Actual	19 G 21 O	1.00	3	19.6	19.9	6 5	20.5 23.5	20.0	15.5	19.7 23.0			
AND	18			Count-Strength Louduch	1391	1482	1346	1921	1200	1473	1207	1576	1693	1353			
Table 18.—SPINNING TEST RESULTS FOR UPLAND COTTON.	17		ם	Strength (the	80.1	72.1	37.5	£ 5	12.4	25.0	24.3	9 55 8 65 8 8	100	52.8			
FOR	16			Counts Actual	19.7	90.0		10.7	10.8	20.2 21.3	20.22	10.6	17.2	10.4			
ULTS	15			Turns Dor lach,	17.98	17.98	19.73	17.08	17.03	17.04	17.08	17.08	15.07	17.08			
RESI	7	RING FRAME PARTICULARS.	! 	Deate	 	29.6	<u> </u>	5. 8 8. 8	8 7 9 8 70	6.9	5 98 6.23	6.63	) ខ្ទ	6.9			
rest	13	BANE PAI	Kďa	Spindlegpood, F	::	0010		9200	8500	9230	9500 8550	9350	0300	9500			
ING 1	13	RING F	(poad)	Front Roller	180	98 5	3	181	192	187	176	190 172	910	101			
PINN	11	arn Decahages 1 tr	Yarn Decahage 100 *pundler hour, *pundler	S #	= :	:	114	192	2 3	5.	12 83		# #				
, N	g	A 520cc		Tolal Last	23.1	6.0	:	<u>.</u>	, 18 6.	g :	34.8	18. ÷	18.9	::			
le 18	0	Ривскить обр		ASTR PRECENTAUES.	WASTR PRECENTAGES	з Репскитабия	Spinning Lors,	<u>.</u> .	8.0	:	0.7	* :	4, :	0.6	6:	•	::
Tab]	8	ASTR PRICES	Card Room Lo			13 s	<del>ļ</del> -	:	. t	E :	14.7	12.0	10.4	10.0	: :		
	7		Blow Room Loss,		10.3	8	: ]	9: :	<u> </u>	181 :	13.1	8. :	8.0	: :			
	•	- T		Welght of Sam	9	្ទ		97	<u> </u>	22	91	91	۵				
	•	_		Connts Aonnol	20 42	្ត ខ	*	8 %	នត	ខាដ	8.2	និនី	2	8 8			
	•	_		Drte of Spinnag.	24-7-30	17-8-31	10-01	18-7-32 18-7-32	10-8-33	5-0-31	27-8-35 20-8-35	20-8-36	17-6-37	14-0-37			
	89			Всазоп.	1920-30	1930-31		1931-32	1932-33	1033-34	1934-35	1035-36	1030-37	1930-37			
	ŧı			Cotton.	Upland	Upland		Upland	Cpland	Upland	Upland	Upland Upland .	Upland	Upland			
	F			Sample No.	7007	1158	Ť	1396 U	1681 U 1891	2475	2820 U 0282	3725 U	3655 U	1			

\* Diameter of ring frame froat roller—t. Diameter of rings—11",
† It is to bo noted that the total loss is for a small sample weighing 10 lbs ; for bulk sample spun under nill conditions it would be less than shown here.

### 19.—BIJAPUR COTTON.

hese samples have been very kindly supplied by the East India Cotton Association, inspection and approval by their Standards Committee, in accordance with an ement made with the Association to supply to the Technological Laboratory, for , samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
1156	Bijapur.	Bijapur.	1930-31.
1397	**	,,	1931-32.
1892	**	77	1932-33.
2474	,,	,,	1933-34.
2842	,,	**	1934-35.
3324	27	,,	1935-36.
3652	••	**	1936-37.
4256	,,	**	1937-38.

I.—SPINNING TESTS.

### Trealment :---

- Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
- 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
- 1934-35 onwards: As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

Spinning Master's Report :--

Cotton:-

					Bijapc	n.			
<del>-</del>		1930-31.	1031-32.	1932-33.	1933-31.	1031-35.	1035-36.	1036-37.	1037-35.
••	• •	Creamy-white	Dull creamy	Duilfsh ercamy- white.	Creamy-white	Creamy-white	Creamy	Creamy	Creamy-white to creamy.
	•••	Very leafy	Leafy: some- what stained.		Very leafy	Very leafy	Leafy	Leafy	Very leafy.
••	••	Full-bodied	Poorish soft	Good	Good	Poori-li	l'alrly good	Good	l'air.
d nepplac	***	••	A good deal knotted.	Somewhat knotted.	Well-glaned	Well-glaned	A little knotted.	Well-ginned	Well-glaned.
••	• •	2% ginned and unglaned.	0.75% ginned and unginned.	0.6% rinned and unginned.		••	Some seeds	0.35 per cent	A few gluned.
•	• •	l'airly clean	A little leafy	Clean	l'airly leafy	Little leafy	Almost clean	Lenfy	A little leafy.
	• •	Even and free of nep.	l'airly good	Even and nep- free.	Good	Good	Good	Good	Good; quite, free of neps.
en flat stri	ps	10.5 grams	22.1 grams	15.0 grains	21.9 grams	22.3 grams	15.4 grams	16.1 gram	16.4 gram.
••	••	Fully prossed							

### Yarn:-

					Bijaru	R.			
		1930-31.	1931-32.	1932-33.	1933-31.	1931-35,	1935-36.	1930-37.	1037-38.
••	• •	Clean	Somewhat leafy.	Clenn	A little leafy	Fairly clean	Almost ciran	Lealy	Fairly clean.
••	••	Somowhat uneven.	Even in lower counts only.	l'airly even	l'airly even	Even	Very oven	Even	Even.
·, ••	••	Fairly free of nep.	Fairly free of nep.	l'res of nep	Fairly free of nep.	free of nep	Practically free of nep.	Slightly neppy.	Free of nep.
***	•••		••		••	••	••		••

Spinning Test Details and Results:—See Table 19 on page 57.

II.—REPORT OF THE STANDARDS COMMITTEE FOR BUAPUR COTTON.

;

						Bijarum.				
1	1		1030-31.	1031-32.	1933-33.	1933-34.	1934-36.	1035-36.	1036-37.	1937-38.
Contract valued under		:	F. G. M. G. Broach No. 2.	F. G. M. G.	Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. In C. No. 2, July J. H. C. No. 2, July J. July J. July J. J. J. J. J. J. J. J. J. J. J. J. J.	F. C. M. G. Broach H. C. No. 2, April/ May 1935 delivery	F. G. M. G. Brosch H. C. No. 2, July/ August 1935 doli- vory.	F. G. M. G. Bronch H. C. No. 2, July/ August 1936 deli- vory.	G. M. G. Broach F. G. M. G. Broach H. G. No. 2, July/ August 1936 deli- vory.	F. G. M. G. Bronch H. C. No. 2, April/ May 1030 dolivory.
Class	:	:•	Fino	Eni good to fine Good	:	Strict fine	Fino	Fully good to fine Fine	:	Fully good.
Colour	:	:	Croping	nish	Reddish brown	Brownish	Brownish white	Brownish	Croamy brownish Brownish groy.	Brownish groy.
gataple Length	:	:	13/18 inch		6/8 inch	3/4 inch	11/16 inch	3/4 inch	11/16 inoh	11/16 inch.
St.plo Strongth	: · :.	:	Fair	Fair	Fair	Fair	Poor	Modořato	Work	Wenk.
Rogularity	:	:	Irregular	Regular	Irregular	Fair	Irrogular	Fairly rogular	Irregular	Fairly regular.
. Value above or below contract rate . ; Rs. 16 cm	stract rate	; <b>:</b> '	Вз. 16 си	Rs. 3 on	Rs. 15 off	Rs. 25 off	Par	Ra. 22'off	Rs. 7 off	Par.
Basis	: ` : ·	:	Rs. 163	Bs. 168	<ul> <li>F. G. M. G. Broach F.  2, July/Aug. H. G. No. 2, April H. G. No. 2, July/ H. C. No. 2, July/ H. C. No. 2, July/ H. G. No. 3, July/ H.</li></ul>	F. G. M. G. Broach H. C. No. 2, April/ May 1936 dolivory Rs. 224.	F. G. M. G. Bronch H. C. No. 2, July/ August 1936 deli- vory, Rs. 224.	F. G. M. G. Broach H. O. No. 2, July/ August 1936 doli- livory, Rs. 228.	F. G. M. G. Broach H. C. No. 2, July/ August 1937 doll- very, Rs. 239.	F.G. M. G. Broach H. C. No. 2, April/ May 1039 delivory, Rs. 161.
Date of Villintian	:	:	18-8-01	13-7-32	26.7.33	20-8-34	20.8.35	8-8-36	3-6-37	10-0-38.
Romarks	:	:	:	:	:	:	:	:	:	;

COLLON.
S FOR BIJAPUR
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TESI
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Table

1	á١		:	١ _		1 _		۱ ـ		1		, 1'			1	_	_	1 _	_		1 _	
127	Relative Homidity (%).		Testing Room,	e.	81	8	2	<u>۽</u>	15	   &	73	R	S	2	1 15	5	5.	   8	2	# 	1. 22	6
			Splnnlug Room.	7.3	52	5	22	65	2	15.	; —	75	5	E E	E	<i>.</i> =	E!	8	67	8	8	. B.
13	ATORE (°F).		Spinning Room.	98	88	18	26	æ	87	88	8	128	80	82	8	8	80	គ	16	īa	SS	8.
តី		tual.	Turns yer inch. Act	17.3	19.2	13.5	15.4	15.1	17.0	15.4	17.0	16.4	17.0	13.1	11.6	15.4	18.7	11.3	15.3	18.2	12.3	16.2
ន			Reps per raid.	9.0	1.7	1.8	1.6	9.6	0.1	1.8	1.5	1.0	6.0	1.5	0.3	0.5	1.0	1.5	5	1.2	0.5	0.5
81			Evenness Class.	2	2	65	4	7	13	-	ĸ	6	••	e= ,		e	"	3	_	4	e	*
15	crts.		Count-Work. Product.	2,071	2,101	3,165	1,006	2,022	2,013	2,321	2,133	2,000	2,569	2,163	3,615	23,362	1,324	3,521	3,169	3,169	3,591	2,468
8	Yann Test Results	Ballistic	Work of Rupture (inch-lbs.)	101.2	103.0	205.4	121.0	125.6	102.8	118.0	107.2	182.1	133.8	123.1	182.1	115.8	116.2	181.0	130.6	101.9	188.0	155.2
10	YARY		Counts Actual.	19.9	1.03	12.0	10.1	19.1	10.6	13.7	10.0	15.9	19.2	10 0	11.5	16.2	20.0	13.7	16.6	20.7	13.8	15.0
138			Count-Strength Product.	1,041	1,211	1,201	1,039	1,130	1,053	1,137	1,207	1,601	1,573	1,612	1,102	1,160	1,757	1,326	1,121	1,159	1,633	1,416
71		LEA.	(.edi) digastië	37.8	g. 63	93.7	5.3	0 0,	53.8	92.1	64.3	0.00	81.5	81.1	81.1	71.0	63.7	94.7	67.1	510.13	105.3	50.0
16			Counts Actual,	19.4	30.3	12.3	15.8	16.0	10.1	15.6	19.7	16.2	19.3	20.0	11.7	16.2	10.7	11.0	16.7	90.0	13.9	15.8
13	-	 	'Carns yer lach.	17.04	20.23	13.99	15.07	15.97	17.08	15.97	17.99	15.97	17.93	19.20	11.03	15.97	19.26	11.03	17.07	19.20	11.09	13.07
11	Particulars.		.Healf.	5.43	5.93	=	61 61	 5	: 81	5. 53	£	5,43	5.57	3.63	5.55	6.83	<b>5.</b> 50	5.19	1.50	4.14	5.38	2, 10
22	<b>Р</b> асун Рапт	ж.	4.1f ,booqe shalqë	7,700	9,700	7,230	1,500	8,000	000°G	8,250	002'0	8,700	8,730	001,0	8,500	8,150	10,200	7,730	8,500	10,200	8,900	0,200
ដ	RING FR	*pas	Front Roller Spo R.P.M.	157	51	186	176	182	181	192	187	551	17.1	2	193	101	101	190	191	102	213	203
11		100	Yarn Breakages per out requestional	16	95 S	ន	\$	103	188	2	6	ត	ត	16	şį	2	ត	c	3	8	22	12
10	tors.		†.esa.I latoT	22.5	:	13.1	:	26.4	:	31.8	:	<u>នូ</u>	:	:	21.5	:	:	£	:	:	33.0	$\vdots$
6	WASTE PERCENTAGES.		esog Bajunidg	0.0	:	0.0	:	0.0	:	6	:	0.3	:	:	0.3	:	:	6.	:	:		:
90	ere P		Cord Room Lu-t.	11.0	:	13.9	:	5.6	:	13.0	:	12.8	:	:	9. <sub>6</sub>		:	10.0	:	:	10.2	:
2	Ä		Diow Room Love.	12.3	:	15.9	:	13.1	:	13.1	:	11.9	:	:	11.9	:	:	13.8	:	:	14,0	:
ی		(Fq)	Neight of Sample (	01		2		=		<b>\$</b> .		2			2			2			٤	
12		•	Counts Nominal.	20.1	J 02	21	2 -	91	20.A	20	8	. 9	20.1	8 E	#	710	10°	#	2	20 13	=	2
4			Date of Spinning.	15-8-31	15-8-31	21-7-32	10-7-32	4-0-33	4-0-33	5-0-34	25 15 15	5-0-35	10-9-35	, 18-9-35	19-8-30	20-8-30	19-8-36	8-6-37	10-6-37	10-6-37	27-0-39	27-0-38
, t		<del></del>	Staton.	1030-31	18-0261	1931-32	1931-33	3x-1:70:	1932-33	1933-34	1033-34	1934~35	1934-35	1034-35	1935-36	1035-36	1935-36	1935-37	1936-37	1936-37	1937-38	1937-39
c1	   		Cotton.	Bijapur	Mapur	Blapur	Blapur	Bijapur	Blapur	Bijapur	Bisapur	Bijapur	Dilapur	Bilapur	Blfapur	Bijapur	Bijapar	Bljapur	Blapur	Mjapur		Jandefin
, , <del>,</del>			Sample No.	11.6	1156 B	1397 B	1397 T	1632	eest	7277	27.2	- 2942	196	23.62	3324		1339 1	3652		3052	1250	_

Dlam'ter of sing frame front collect—2. Diameter of sings—1 2.

F If is to be noted that the total low is for a small sample weighing 10 libs; for bulk sample spun under mill conditions it would be been shown here.

### 20.—BAGALKOTE COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
1157	Bagalkote	Bagalkote	1930-31
1433	,,	71	1931-32
1893	,,	"	1932-33
2460	29	••	1933-34
2840	13	**	1934-35
3391	",	••	1935-36
3653	<b>34</b>	,,	1936-37
4257	,,	**	1937-38

### I. SPINNING TESTS.

### 1. Treatment :-

- (a) Blow-room—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room:—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter Rover and spun from single hank roving on Ring Frame No. 1.
  1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:

				BAGALEC	OTE.			
	1030-31.	1931-82.	1932-33,	1933-84.	1934-35.	1935-38,	1936-37.	1937-38.
Colour	Creamy	Creamy-white	Creamy	Dullish ereamy.	Creamy	Creamy-white	Creamy	White to cre
Cleanliness	Leafy	Leafy; slight- ly stained.	Somewhat stained ; leafy.	Leafy	Leafy	Leafy	Leafs	my-white. Very leafy.
Feel Ginning and nappiness	Good	Well-glaned	lGood	Good	knotted and nepped by	Well-glaned	Good-bodied	Fair. Well-ginned.
Seeds	A fuir amount of cut seed; 1.9% gin- ned and	ned.	1.2% ginned and ungin- ned.	2.07% partly ginned seeds and kapas.	gindler.	1.88% full clean sceds.	Gioned and un- gioned 0.70%	A few ginard
Card Sliver	unginned. Fairly clean Even and free	Almost clean Fairly good	Even and nen-	A little leafy	Fairly clean Somewhat		A little leafy Good; nep-free	
Weight of 10 flat strip Remarks	of nep. 1,21.2 grams .A triffe knotty	19.2 grams Ring frame run at unusually low speed du to excessiv breakages,		24.4 grams	neppy. 27.9 gmma	17.5 grams	14 % grains	19.7 grams,

	_	
(b)	Y arn	:

						Bigair	OTE.	-	_	
			1930 31.	1931-32,	1982-83,	1033-34.	1934-35.	1933-36	1030-37.	1937-38.
Cleanliness	.,		Slightly leafy	. Fairly clean , ,	Clean	Almost clean	Fairly clean	A little leafy	Fairly leafy	A little leafy.
Evenness		••	Fairly even	Unusually uneven.	Fairly even	Fairly even '	Even	Even	Even	Even.
Nepplaces		••	Fairly free nep.	of Almost nep-free	Almost free of nep.	Almost free of	Somewhat neppy.	Almost free of nep.	Almost free of nep.	Free of nep.
	••	••	٠.	A good deal		٠.,	A triffe slubby.		••	

3. Spinning Test Details and Results :- See Table 20 on page 60.

# II.—REPORT OF THE STANDARDS COMMITTEE FOR BAGALKOTE COTTON.

•					ВАСАГЕОТВ	re.			
	•	1930-31.	. 1931-32.	1932-33.	1933-34.	1034-35.	1035.36.	1036-37.	1937-38.
Contract valued under	:	F. G. M. G. Broach F. G. M. G. Broach. No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. Hedge Contract Hedge Contract No. 2, July/Aug. No. H. I. 1933 delivery.	<ul><li>F. G. M. G. Broach</li><li>Hedge Contract</li><li>No. 2, July/Aug.</li><li>1935 delivery.</li></ul>	F. G. M. G. Broach Hedge Contract No. 2. April/May 1937 delivery.	F. G. M. G. Broach Hodge Contract No. 2, July/Aug. 1937 delivery.	G. M. G. Broach F. G. M. G. Broach Hodge Contract Hedge Contract No. 2, July/Aug. 1937 delivery.
Class	:	. Kino	Fine	Fully good	Fino	Fino	Fine	Fine to Superfine Fully Good.	Fully Good.
Colour	:	Greyish creamy	Dullish brown	Brown	Brownish	Brownish white	Croamy brown	Brownish	Brownish grey.
Staplo Lengtin	:	. 27/32 inoli	3/4 inch	11/16 inch	Barely 3/4 inch	13/16 inch	13/16 inch	3/4 inch	3/4 inch.
Staple Strongth	:	. Fair	Fair	Good	Fair	Fair	Good	Bair	Fairly strong.
Rogularity	:	. Irregular	Irregular	Regular	Fair	Fair	Regular	Rogular	Regular.
Value abovo or below contract rate		Rs. 20 on	Par	Par	Rs. 15 off	Rs. 20 on	Rs. 5 off	Par	Rs. 5 on.
Basis	:	Rs. 162	Rs. 172	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery, Rs. 207.	F. G. M. G. Broach F. G. M. G.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1935 delivery, Rs. 224.	Hedgo Contract No. 2, April/May 1037 Rs. 221.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1937 delivery. Rs. 239.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1939 delivery, Rs. 151.
Date of Valuation	:	. 10-8-31	28-7-32	-7-33	13.8.34	20-8-35	28-0-36	3-6-37	10-9-38.
Remarks	:	:	÷	•	:	:	:	:	:

	ä	E 20		Testing Room.	8	5	12	3	8	7	82	8	15	<b>7</b>	E	El .	7	<u>۶</u>	3	F	<u> </u>	12	11	72	] =	<b>=</b>	l			
	8	REMAINS (%).	_	Spinning Room.	82	ŧ	5	1.	8	얁	62	F	25	<b>z</b>	12	:	2	25	122	먇	<u>و</u>	8	£	8	5	. z				
	25	HATOLY STORE		smoosi kalanjag	83	82	8	83	8	8	8.	<b>.</b>	8	8	ã	ક	5	\$	3	89	8	គ	2	5	8	8				
٠	<b>5</b>			Turns per inch. Act	17.3	19.4	14.2	10.3	19.4	16.3	10.0	15.5	17.3	18.8	15.4	17.3	18.5	19.0	15.0	17.2	18.5	2	15.0	18.5	:	19.5				
ı	ន			Neps per yaid.	ei ei	2.0	1.5	1.5	1.0	1.5	1.8	1.8	et ei	0	4.0	3.5	8:	ei ei	2.5	:	1.0	8.0	0.0	61	٤	: :				
	티			L'aconces Class.	.,	*		•	t-	•	4	-	+	•	6	-	<b>.</b>	•		-	4	6	6	*	"					
ż	21	ULTS.		Count-work Product	2012	2157	555	1870	1701	2103	2358	25	2156	0320	3162	2660	2683	1912	3	2233	2278	2502	0500	9530	0200	1613	1			
OTTO	ន	YARY TEST RESULTS	Daeristic.	oruptus of Rupture (.di-dani)	104.6	106.9	184 5	117.0	92.4	137.3	147.4	128.2	100.4	112.4	102.8	130.4	133.6	0.70	13.2	109.4	110.6	189.2	117.4	111.8	182					
S E	<b>a</b>	YARY	-	Counts Actual	20.3	8 61	19.1	15.0	18.8	16.0	10.0	19.4	19.7	10.4	16.4	50.4	1.05	Ţ.	10.4	20.0	20.0	11.7	17.0	20.0	15.3	90.0				
LKOI	18			Count-Strength Product.	1134	138	620	75	413	1435	1555	1380	1266	1113	140	1631	1500	1713	1380	1230	1451	1463	1402	1336	1702	101				
AGA	-2		LEA.	Strength (lbs)	67.0	3.1	56.0	8.1°	8.3	93.3	93.1	84.3	0.10	19.1	110.2	70.7	0.0	50.0	85.7	2,19	e) ()	101.5	84.8	g.	111.8	9.0				
OR B	2			Counts 4etual.	10.0	20.0	12.0	17.8	10.2	15.6	15.3	19.4	0.01	10.8	16.7	20.0	20.0	5.5	19.1	20.1	20.1	14.0	15.0	8.03 8.03	15.4	20.2				
TEST RESULTS FOR BAGALKOTE COTTON.	£ .			Turns per inch.	17.98	20.23	14 03	10.01	20,23	15.07	16.97	16.97	17.08	19.26	15.97	17.09	10.26	19.73	13.97	17.09	19.20	11.99	15.07	19.26	16,97	10.24				
ESUL	#	Particulars.		.herd	6.03	6.19	4.90	2,00	5 81	5.23	6.36	6.53	5,83	5.83	5.65	6.03	5.93	7.22	6.43	5.93	4.07	5,24	4.77	f.14	5,61	91.10				
STR	E E	FRAME PART	F. M.	Spindle Speed, E.	8100	10850	0000	0000	0200	8000	8300	8250	8450	0300	8300	8550	9000	9559	8400	8500	10200	6130	8350	10200	9100	10800	١			
	2	RING FR	'pood	Front Roller S.	164	190	164	130	110	182	103	188	175	188	103	180	184	170	101	170	194	208	161	190	500	207				
SPINNING	=		100	Tarn Breakages per spludies per hour.	23	63	F61	253	EL	ž,	18	ដ	4	ដ	18	10	2	33	22	10	Ç	•	13	2	9	47				
SPI	2	9X8.		Total Loss.†	24.5	:	27.1	:	:	24.1	:	27.1	:	:	24.0	:	:	:	22.23	:	:	21.5	:	:	23.1	:	ľ			
- (	8	Percentable		Splanla, Lous.	0.6	:	80		:	0.3	:	0.3	:	:			:	:	0.4	:	:	0.0	:	:	0.5	:	ŀ			
									Card Room Loss.	12.5	:	14.8	:	:	11.7	:	14.0	:	:	15.3	:	:	:	12.2	:	:	8.1	:	:	11.8
Table	١-	WASTR	Diow Room Loss.			:	13.7	:	:	13.8	:	16.0	:	:	11.3	:	:	:	14.6	:	:	14.4	:	:	12.3	$\exists$				
	ا۔		(par)	Weight of Sample (	10		6			2		2	_		2				92			2			92	-				
	۵			Counts Nominal.	203	200	의	16B	ğ	191	1613	ĕ	20.4	203	104	20A	201	**	10	20. 40.	20B	7.	104	ខ្ល	10.4	ğ				
ı	+			Date of Spinuing.	14-8-31	14-8-31	20-8-32	25-8-32	20-8-32	. 4-8-33	4-0-33	23-8-31	22-8-31	82-8-31	3-0-35	3-9-35	3-0-35	17-0-35	7-10-30	5-10-30	6-10-36	11-0-37	10-0-37	11-0-37	27-0-39	28-0-38				
	65			Season	1830-31	1030-31	1931–38	1931-32	1031-38	1932-33	1932-33	1839-34	1933-34	1633-34	1934-36	1034-35	1934-35	1034-35	1935-30	1035-36	1935-30	1036-37	1930-37	1936-37	1937-38	1937-38				
	eı	-		Cotton.	Baralkote.	Bayalkote.	Bagalkote.	Bagalkote.	Bagalkote.	Bagalkote.	Bagalkote.	Bagafkote.	Bagalkote.	Bagalkote.	Bagalkote.	Bagalkote.		Bagalkote.		Bagalkote.	Bazalkote.			Bagalkote.	Bagalkote.	Bagalkote.				
	-			Bample No.	1157 B		1433 D	1433 13	1433 10	1893 (Ba	1693 Hz	2460 B	2460 Ba	2460 330	2840 Ba		_	2840 Ba		_	3391 Da			3653 Ba		4267 Ba				

• Diameter of ting-frame front roller.—F. Diameter of rings—11...
† Il is to be noted that the total loss is for a small sample weighing 10 ling, or thereadout; for bulk eample squar under mill conditions it would be then then shown here.

### 21.—CAMBODIA COTTON.

These samples have been very kindly supplied by the East India Cotton Associafter inspection and approval by their Standards Committee, in accordance with an ement made with the Association to supply to the Technological Laboratory, for , samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
762	Cambodia.	Coimbatore.	1929-30.
1159	"	Tirupur.	1930-31.
1398	,,	,,	1931-32.
1894	;,	,,	1932–33.
2436	,,	**	1933-34.
2839	21	<b>,</b>	1934-35.
3390	,,	77	1935–36.
370]	<b>3</b> *	<b>,</b> •	1936–37.

### I.—SPINNING TESTS.

### reatment:--

- Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal Cleaner, Grighton (once), Gridded dust trunks, Cage exhaust, Hopper Feeder, Scutcher (3 times).
- Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### pinning Master's Report:—

### (a) Cotton:—

					CAMBODIA.				
	į	1920-30.	1930-51.	1931-32.	1932-33.	1933-34. 1934-3	5.	1935-36.	1930-37.
••		Creamy - white to creamy; bright.		Creamy-white ; bright.	Creamy-white ; bright.	White to crea-White to my-white; bright.	crea-	White to crea- my-white; bright.	Creamy-white ; bright.
	••	Clean	Fairiy clean	Clean	Clean	Clean Clean	••	Olean	Clean; a tritle stained.
		Good bodled	Very good	Good	Good-bodied	Good Softish am	ooth.	Good-bodled	••
d Neppii	1035	Nopped and knotted.	Well-ginned	Fairly woll-	Fairly well- pinned.	A little knotted A little kn in ginning. in ginnir	atted g.	Fairly well- glaned.	A little knot- ted.
••	••		••	••		1% full seeds Some ungli	ned	••	A few full gin- ned seeds.
	••		Clean	Clean	Clean	Clean Clean		Clenn	Clean
	••	A little neppy	A trifle neppy	Fairly good	Fairly good	Even and some- Fairly good what noppy.	1	A little neppy	Neppy.
LO flat st	tips	22.1 grams	25.3 grams	22.2 grani •	27.8 grams	28.8 grams 31.0 gram	١,	21.2 grams	26.0 gram4.
٠				••					

### (b) Yarn:—

,				Cambodia.				
_	1929-30.	1930-31.	1031-32.	1002-38.	1933-34.	1D31-35.	1935-96.	1030-37.
	Lairly even	Even	Even	Fairly oven			20's only. Pairly noppy	Fairly even.
					!			

II.—REPORT OF THE STANDARDS COMMITTEE FOR CAMBODIA COTTON.

					62						
	1936-37.	F. G. M. G. Broach Hodgo Contract No. 2, July/Aug. 1937 delivory.	. Fino.	Greamy.	29/32 inch.	Fair.	Fair.	Re. 85 on.	F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G	30-6-37.	:
	1935-36,	F. G. M. G. Broachi Hedge Contract No. <sup>2</sup> , April/May 1937 delivery.	fino	Creamy	15/16 inch	Fair	Moderately regular	Rs. 36 on	F. G. M. G. Broach Hedgo Contract No. 2, April/May 1937 delivery, Rs. 221.	28-9-30	:
	1934.35.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1935 delivory.	Strict Fine	Creamy-white	15/16 inch	Fair	Fair	Rs. 75 on	R. G. M. G. Broach F. Hedge Contract No. 2, July Aug. 1035 delivery, Rs. 224.	20-8-35	:
	1933-34.	f. G. M. G. Broach No. 2.	Barely fully good	Dull creamy	15/18 inoh	Good	Slightly irrogular	Rs. 65 on	F. G. M. G. Broach July/Aug. 1034 dolivery, Rs. 221.	31.7.35	:
	1932-33.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery.	Fine to superfine Barely fully good Strict Fine	Greamy-white	31/32 inch	poog	Regular	Rs. 65 on	F. G. M. G. Broach No. 2, July/Aug. 1933 dolivory, Rs. 207.	26-7-33	:
	1931-32.	M. G. Broach F. G. M. G. M.	Supertino	Creamy	Ono inch	Good	Regular	R4. 60 on	Rs. 168	13-7-32	:
	1930-31.	F. G. M. G. Broach No. 2.	Fully good	Creamy	31/32 inch.	Good	Regular	Re. 70 on	Rs. 162 ···	10-8-31	:
	1929-30.	F. G. M. G. Broach. F. G.	Fino	Creany	One inch	Good	Regular	Rs. 90 on	Rs. 242	6.30	:
		Contract valued under	Class	Colour	Staple Longth	Staple Strongth	Rogularity	Value above or below contract rute	Bosis	Date of Valuation	Remarks

COLLON.
CAMBODIA
FOR
FEST RESULTS FOR
TEST
21.—SPINNING T
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HUXIDITY (%).		Splaning Room.	12 00	55	35 55	85 08	17 25	76 S2	20 68	35 	2 2	31 22 03	\$0 0 0	2		<u>۽</u>	22	12	5 .:	81		S
RATURE (FF).		ational galanies.	- -	69			123	95	28		1 75			12		2	8		£	12		:3
	Tums per inch. Letual.		19.0	31.12	18.8		2.01	31.12	10.1	, 0.02 0.02	"   E:2	31.4	9.55	11.1		0.55	1 22	20.0	61	1:5		
	Ling 194 kdaX			1. 1.	3.5	€i  !-	ļ	5. 21	3.5 16	8.6 	3.6 2.1	71 	31 	3.8		;;	3.5	71	ફો  જ્	=		*i *i *:
,	Тучеппеза Свам.			17		<u>-</u>	ei 8	# #	ei 		15		-i 	;;		:; 	n		ri 			÷ 
					e.						<u> </u>						<u>                                     </u>					
CHULTS.	ij	Count-Work Product.	2117	2038	2764	2002	2078	2555	2662	#	2863	8283	ਜ਼ ਜ਼	2769	1631	1012	1987	2565	<u> </u>	27.16	2072	F72
YARN TEST RESULTS.	Balebatic	Work of Rupture (inch-	102.4	68.6	118.8	÷.06	113.0	86.0	110.0	?! ?!	133.2	£8.0	6.55	131.1	34.6	¥.02	1.11	90.0	11	1	57.6	80.8
YARN		Counts Actual.	5.6	30.0	23.3	.:	84.55	29.5	6.10	£0.1	20.0	30 7	9.7	20.6	17.	:: ::	20.0	18 18 19	#	20.0	30.2	8.13 1.33
	LvA.	Count-Strength Product.	682	1307	17.73	1613	1915	1518	E) C1	1331	1672	1120	13:12	13.62	12791	1361	1051	1670	7557	1853	1088	1380
i		(Jul) strength (lb4.)	7.10	1.91	73.0	53.6	- e.	11.4	65.n	: <u>:</u>	2.5	1.9	13. u	2.2	17.	1:	3.0	57.0	9.0	0.20	51.5	10.11
		Jantof. etanoD	23.0	30.0		30.1	5.1.5	50.5	23.6	6.65	0.02	30.%	:- 8	20.2	۰۰۰ ج وز	:: E	0.6	- ·	 !!	;;	30.8	3:1
_	Turns per lin di.		10.73	97.17	10,73	23.11	10.73	21.80	19,73	21.56	17.93	21.86	23.26	17.08	£.15	23.20	17.98	21.56	97.78	17.98	92.12	23.20
LARS.	.half		5.05	 8	5.91	 98	3.76		5.33	7.03	18.5	17.0	7. ts	6.07	6.23		70.0	6.03	15:	26,0	0.50	 5
FRANK PARTICULARS.	spinde Speed,		:	:	0076	9200	0000	9020	Outid	0016	0530	0000	0206	90.70	9700	0020	9550	0016	0010	10250	10200	0036
	Pront Roller Speed,			 99	2	160	22	- F21	- E	 	igi	195	917	107	82	- - -	81	- B1	 §	015	=======================================	148
Rexo	Yarn Breakases per 100.  **Spindes per hour.  **Print Prints Prin			 8		- ?!	ន	ទូ	;3		<u>s</u>	<u>.</u>	2	,,,	=	2	-	<u> </u>	 	   ਜ	<del></del>	<del></del>
	001 1	16.7	· :	12.0	:	10.0	<u>.</u>	18.9	:	E: 3	<u>-</u>		19.5	<u> </u>	:	17.2	<u> </u>	<del></del>	   <u>:</u>		<u> </u>	
STAGES.		0.0	- :	0.3	- · · ;	0.4	:	9.4	:	7.	:	- <u></u>	9.2	:	:	0.3	 :	<u>.</u> :	0.5	 :	·  :	
WASTE PERCENTAGES.	-	1.3	:	5.0	· <b>·</b>	11.7	:	13.8	:	5:	:	 :	11.8	:	:	1 2	··· ·	;	12.8	:	 :	
Wast	lilow Room Laws,			:	, i.i.	:	5:	:	12	:	13	:	:	0.5	:	;	13	 ;	:	1;	 :	:
-	(tpuc)	Welght of Sample	9		9		2		2		g			2	••••		2			=		
Counts Nominal.			30.1		1000	   51	30.1	7,	30.1	ន	30.5		ន	30.1	 #	ទ	30.1	ត	ន	20.1	<del></del>	
Cotton. Stason. Date of Spining.			19-6-30	20-6-30	18-8-31	18-8-31	20-7-32	20-7-33	80-8-3H	30-5-33	9-8-9 10-8-9	9-8-34	15-2-0	1-0-33	4-9-35	5-0-3:	5-10-36	0-10-30	7-10-36	15-7-37	17-7-71	10-7-37
			1929-30	1939-30	1930-31	1939-31 1	1931-32	E-itoi	1932-33	1932-33	1033-34	1933-34	1933-34	1934-35	1934-33	1931-35	1935-30	1935-36 0	1935-30 7	1936-37	1936-37 1	1930-37
			Cambodla 19	Cambodla 19	Cambodia 19	Cambodia 19	Cambodia 19	Cambodia 19	Cambolla 19	Cambodla 19	Cambodia 10	Cambodia 19	Cambodia 19	Cambodla 18	Cambodia 13	Cambodia 19	Cambodia 10	Cambodia 15	Cambodia 15	Cambodla 19	:	'01  Cambodia   1936-37   10-7-37
Sample CC No.			762 Cam	763 Cam	1139 Cam	1159 Сап	1393 Can	1398 Can	1894 Carr	1894 Can	2330 Can	2130 Can	2636 Can	2639 Can		2839 Can	#390 Can	2390 Cam	3390 Can			3701 Cam

### 22.—TINNEVELLY COTTON.

These samples have been very kindly supplied by the East India Cotton Association, inspection and approval by their Standards Committee, in accordance with an arrange-made with the Association to supply to the Technological Laboratory, for testing, es of fair average cotton of the commercial crop.

Sample No. Cotton. Place. Sea	son.
1162 Tinnevelly. Tuticorin. 1930	)-31
1400 ,, 1933	<b>-32</b>
1883 ,, 1932	-33
2461 ,, 1933	3-34
2841 ,, 1934	<b>35</b>
3392 ,, Virudanagar. 193	5–36
3699 ,, 1930	37
4260 ,, Tuticorin 193'	7–38

### I. SPINNING TESTS.

### Preatment :---

- Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- o) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
  - 1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### Spinning Master's Report :-

### ı) Cotton :--

		I				Tinnevi	CLLY.			
-	_		1930-31.	1931-32,	1932-33.	1933-34.	1934-35.	1935-86.	1936-37.	1937-35.
	••	••	Creamy-white	white:	white:	Creamy-white ; bright,	creamy- white:		Creamy-white	Creamy-white: brightish.
3	••	••	occasional	brightish. Fairly clean	bright. Clean	Fairly clean	bright. Fairly clean	l stained:a		A little leafy.
		••	spots of stain. Soft but good	Good	Good	Smooth and bodied.	Good	little leafy. Good-bodied	Good	Good.
nd	pepp	ines	Fairly well- ginned.	Fairly well- ginned.	Well-ginned	Slightly knotted.	Well-ginned	ì		A little knotted
	••	••		••		••			Some	•••
79	••	••	Practically clean	Almost clean	Clean	Fairly clean	Clean	Almost clean	Good	Leafy.
•	••	••	Even and free	Almost nep-	Good	A little neppy	Good	Good	Good; neppy	A little neppy.
110	Aat	strips	19.0 grams	20.6 grams	22.4 grams	27.2 grams	26.1 grams	16.7 grams	29.0 grams	18.5 grams
	••	•-				l	l '	۱ ا		••

### (b) Yarn :---

_					TINNE	TELLY.			
		1930-31,	1931-32.	1932-33.	1933-34.	1934-35,	1935-36.	1936-37.	1937-38.
13. 15.1	 ••	(	Fairly even	Fairly even	Fairly neppy	Even	Even A little neppy	Even	A little leafy. Even. A little neppy.

Spinning Test Details and Results: - See Table 22 on page 66.

## II.—REPORT OF THE STANDARDS COMMITTEE FOR TINNEVELLY COTTON.

1930-31.	1931-32.	1032-33.	1933.34.	1934-35.	1935-36.	1936-37.	1037-38.
F. G. M. G. Broach F. G. M. G. No. 2.	F. G. M. G. Broach F. No. 2.	F. G. M. G. Broach! No. 2, July/ Aug. 1933 delivery.		Broach F. G. M. G. Broach Sontract Hedge Contract No. 2, July/Aug.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1037 delivery.	F. G. M. G. Broach Hedgo Contract No. 2, July/Aug. delivery.	F. G. M. G. Broach Hodgo Contract No. 2, April/May 1939 delivory.
Fully good to fine	:	erfine	Strict Fully good	:	Fully good to fine	:	Fully good.
Creamy-grey				:		:	Creamy.
3/4 inch	:	16 inch		:	:	:	3/4 inoh.
Weak	:	:	:	:	:	Fair	Wcak.
Very irregular	:	:	:	:	:	:	Irregular.
Rs. 30 on	:	40 on	Rs. 25 on	Rs. 30 on	c uo s	:	Rs. 10 on.
Rs. 143	:	G. M. G. No. 2, Ju 1933 Ns. 207.	G. M. ( Hedge No. 2, 1034 Rs. 220	I. G. M. G. Hedge No. 2, Ju 1935 Rs. 22 f.	. M. G. cdgo (6. 2, Ap	F. G. M. G. Broach Hedge Contract No 2, July/Aug delivery, R9, 225	F. G. M. G. Broach Hedge Contract No. 2, April/May 1939 delivery, Rs. 151.
25-8-31	:	;		:	28-0-36	28-6-37	10-9-38.
Poor style for this growth,	:	:	:	:	÷	:	•
	No. 2.  Fully good to fine Creamy-grey 3/4 inch Weak Very irregular Rs. 30 on Rs. 143 Poor style for tl growth.	No. 2.       No. 2.         Fully good to fine       Superfine         3/4 inch       7/8 inch         Weak       Fair         Very irregular       Regular         Rs. 30 on       Rs. 25 on         Rs. 143       Rs. 168         25-8-31       13-7-32         Poor style for this growth.	No. 2.       No. 2.       No. 3, July/ Aug.         Fully good to fine       Superfine       Superfine         Creamy-white       Greyish-white          3/4 inch       7/8 inch          Weak        Rafe          Weak        Regular          Rs. 30 on       Rs. 25 on        R. 40 on         Rs. 143       Rs. 108        F. G. M. G. Bronch 1933         25-8-31       13-7-32        26-7-33         Poor style for this growth.	No. 2.         No. 2.         No. 2.         Ind. 3. July/Aug.         Hodgo           Fully good to fine Superfine Superfine Superfine Strict Full         Creamy-white Superfine Strict Full         Strict Full           3/4 inch 7/8 inch 13/16 inch Full 13/1         Fair Good Fair         Fair Good Fair           Weak Regular Regular Regular Itregular Bs. 30 on Rs. 25 on Rs. 40 on Rs. 25 on Rs. 25 on Rs. 20 on Rs. 26 on Rs. 207.         Rs. 25 on Rs. 26 on Rs. 207.           Rs. 143 Rs. 108 F. G. M. G. Bronch F. G. M. G. Bronch F. G. M. Rs. 207.         Rs. 207.           Poor style for this growth.         Rs. 26-7-33 13-8-31	No. 2.         No. 2, July/Aug.         Hodge Gontract Hedge Gontract Hedge Gontract Hodge Gontract Hodge Gold Gold Gold Gold Gold Gold Gold Gold	No. 2.         No. 2.         No. 2.         No. 2.         No. 2.         Hodge of the properties         Hodge of the prop	No. 2.   No. 2.   No. 2.   July/ Aug.   Hodge Contrnet
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1935-30

Cinnevelly Cinnevelly Cinnevelly Cinnevelly

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2841 2841 2841 0.2

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99.7 76.0 64.6

14.7 16.0 19.8

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6.67 6.67

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**Finacvelly** 

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Tinnevelly

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15.4 17.3 18.6 15.4 17.2 18.0 15.6 15.3 15.4 ç 8. 5. 8 6 2 2 5.5 5.4 8.4 2 2 2 61 n + ELCHUCE CHER 2,442 2,503 1,90 2,544 2,378 2,207 ត Product YARN TEST RESULTS. Table 22.—SPINNING TEST RESULTS FOR TINNEVELLY COTTON. 127.8 155.0 200.2 200.8 170.0 111.0 15 6 15.5 15.5 15.8 10.1 20.2 19.5 16.0 20.1 2 1,016 1,250 1,311 1,161 982 1,261 # 18 71.1 49.6 61.8 84.1 52.3 50.0 23.8 105.8 63.0 LE! 15.1 16.3 20.1 20.2 12.4 15.6 15.0 15.07 13,02 13.92 15.07 17.03 19.26 15.97 17.98 10.20 2 6.11 8. 8. 4. 8. 8. 4. 6.03 5.00 5.00 5.00 5.03 5.05 5.53 RING FRAME PARTICULARS. 7,300 7,050 8,250 8,150 9,600 8,600 8,750 9,650 7,330 169 162 198 160 25 E 28 101 176 186 152 합 ង ន 9 8 5 3 8 Ξ Š 8 5 2 17.3 17.6 19.0 10,0 19.5 : : : : WASTE PERCENTAURS. 9.5 . . 9.0 6 7. 0 : : 11.7 10.3 : :: 13.7 : : : 13.1 : : 6.9 6.7 6.0 5.3 : : : : 2 2 9 10A 20A 20B 10A 20A 20B 164 21 16 1 16 16 21-7-33 2-9-31 21-7-33 18-8-33 23-8-34 22-8-34 9-0-38 22-8-31 5-9-33 9-0-8 1931-32 1932-33 1033-34 1932-33 1931-35 1930-31 1933-34 1933-34 1931-35 Season. 1934-35 Timovelly Tinnevelly Cotton. Cinnevelly finnevelly Cinnevelly Innevelly Cinnevelly rinnevelly Clanevelly Innevelly 'Innevelly

Sample No.

1400

1883

2461 2461 2461

102

t be to be noted that the total loss is for a sawil extrate weighing 10 the, ; for bulk example spun under mill conditions it would be fees than shown here. . Diameter of ring frame front roller: 1". Diameter of rings: 11".

### 23.—KARUNGANNI COTTON.

These samples have been very kindly supplied by the East India Cotton Associater inspection and approval by their Standards Committee, in accordance with an ement made with the Association to supply to the Technological Laboratory, for samples of fair average cotton of the commercial crop.

Sample No.	Cotion.	Place.	Season.
1160	Karunganni	Virudanagar.	1930-31
1399	,,	Tuticorin.	1931–32
1895	**	<b>"</b>	1932-33
2476	"	Tirupur.	1933–34
<b>284</b> 3	22	Tuticorin.	193435
3393	,,	Virudanagar.	1935–36
<b>3700</b>	,,	Tuticorin.	1936–37
4259	29	,,	1937-38

I.—Spinning Tests.

### ¹reatment :—

Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### pinning Master's Report:—

### Cotion:—

		-				Karunga	NNI.			
			1030-31.	1931-32.	1932-33,	1933-34.	1934-35.	1035-30.	1036-37.	1937-38.
		••	Creamy. white; bright.		White to creamy white; bright.	White to creamy white; brightish.	croamy-	White to creamy white; bright.	bright.	Creamy-white
••		••	Fairly clean.	Almost clean.	Clean.	Fairly clean.	Fairly clean.	Clean; a little stained.	Fairly clean.	A little leafy.
••			Good.	Good.	Good-bodied.	Good soft.	Good amooth.	Good smooth.	Good smooth.	Good.
g nel	•	est.	Well-ginned.	Well - ginned apart from some knotti- ness.		Slightly knotted in ginning.	Pairly well- ginned.	Well-ginned.	A little knot- ted.	Knotted.
٠.				••	••	••	••	••	••	
٠.			Almost clean.	Clean.	Clean.	Fairly clean.	Almost clean.	Fairly clean.	Clean.	Fairly clean.
••		••	Practically free of nep.	Fairly good.	Good.	Somowhat neppy.	Good.	Good.	Neppy	Neppy.
0 fla	t str	ips	21.7 grams.	20.7 grams.	19.6 grams.	26.3 grams.	28.0 grams.	15.3 grams.	33.6 grams.	19.9 grams.
	••				••	,,	••	••		

### Yarn:-

					Kanungan	rr.			
		1930-31.	1931-32.	1932-33.	1033-31.	1934-35.	1935-36.	1030-37.	1937-38.
••	••	Practically clean.	Clean.	Clean.	Fairly clean.	Olean.	Almost clean.	A little leafy.	A little lenty.
••		l'airly even.	Fairly even.	Fairly even.	Even.	Fairly even.	Even.	Even.	Even.
••	••	Somewhat neppy.	Somowhat neppy.	Free of nop.	Somewhat noppy.	Fairly noppy.	Fairly neppy.	Neppy.	Neppy.
••		••		A triffe slubby.		A triffe slubby.		٠.	

Spinning Test Details and Results:—See Table 23 on page 69.

II.—REPORT OF THE STANDARDS COMMITTEE FOR KARUNGANNI COTTON.

							Kanui	Каприялина			
	ŀ		<u></u>	1930-31.	1031-32.	1032-33.	1033 34.	1031-35.	1035-36.	1936-37.	1937-38.
Contract valued under	:	;	:	F. G. M. G. Broach	F. G. M. G. No. 2.	Broach F. G. M. G. Broach F. G. M. S. July/Aug. H. C. May M. 1933 delivory.	F. G. M. G. Broach S. H. C. No. 2, April/ May 1035 delivery.	S. M. G. Bronchi H. C. No. 2, July/ August 1935 deli- very.	M. G. Bronch F. G. M. O. Bronch F. II. C. No. 2, July 11. C. No. 2, April 11. C. No. 1, April 11. C. No. 1037 delivery.	F. G. M. G. Broach F. H. C. No. 2, July J. August 1937 deli-	F. G. M. G. Broach H. G. No. 2, April/ May 1039 delivery.
Class	:	:	:	Fino.	Extra superfine.	Superfino.	About fine.	Strict Sno.	Fino.	Strict fine.	Fully good to fine.
Colour	:	:	<u>:</u>	White to creamy.	Whitish.	Slightly ereuny-Creamy.		Whitish.	Creamy-white.	Whitish.	Creamy.
Staple length	:	;	:	15/16 inch.	15/16 inch.	7/8 inch.	7/8 inch.	7/8 inch.	7/8 inch.	29/32 inch.	7/8 inch.
Staple strongth	:	:	_ <del>_</del>	Good.	Good.	Good.	Fair.	Good.	Fair.	Fair.	Soft.
Rogularity	;	:	:	Rogular.	Regular.	Regulnr.	Fair.	Irregular.	Regular.	Irregular.	Irregular.
Value above or below contract rate	ontract		:	Rs. 65 on.	Rs. 35 on.	Rs. 15 on.	Rs. 35 on.	Rs. 50 on.	Rs. 20 on.	Rs. 60 on.	Rs. 25 on.
Basis	:	:	:	Rs. 162.	Rs. 168.	F. G. M. G. Broach! No. 2, July/Aug. 1933 doli vory. Rs. 207.	F. G. M. G. H. C. No. May 1935 Ra. 221.	Broach F. G. M. G. Broach F. C. April/ II. C. No. 2, July Jellvery, August 1935 deli- very, Ks. 224.	F. G. M. G. Broach II. G. No. 2, April/ May 1937 delivory, Re. 221.	G. M. G. Broach F. G. M. G. Broach I H. C. No. 2, April/ May 1937 delivery, August delivery, Rs. 221,	Broach F. G. M. G. Broach !, July/ H. C. No. 2. April/ May 1939 delivery, Rs. 151.
Date of Valuation	:	:	<u> </u>	10-8-31.	13-7-32.	26-7-33.	20.8-31.	20-8-35.	28.0-36.	30-6-37.	19.9.33.
Remarks	:	:	:	:	:	:	:	;	:	:	:

TON
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RESULTS FOR KARUNGANNI
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TYR.		Testing Room,	83	67	83	23	ಇ	83	7.	ĸ	88	83	Ę	ដ្	70	18	82	02	88
. RELATIVE. HUMDETY (%).		Spinning Room.	ę	11	5	11	8	29	Sī.	18	72	11	61	ĮĮ.	8	8	Ę.	8	8
TRMPER- ATCRE (°F.).		Splaning Room.	84	28	87	88	87		33	æ	88	<b>3</b> 5	8	88	28	**	88	80	89
		Turna por inch.	17.2	19.0	17.2	18.8	15.3	17.2	15.5	17.3	15.5	17.4	15.2	17.3	15.3	17.3	15.3	17.3	18.9
		Nops por yard.	13	5.0	3.0	ຕ ຕຸ	0.5	1.0	3.6	4.0	63	8.5	e;	3.8	61	ю 63	0.4	61	3,8
		Dyenness Class.	*	LO .	-7	La	7	10	, ,	-#	-	**	,,	es		6	, ,	69	
LTS.	-	Count-nork Product.	9, 632	2,538	2,367	2,453	8,048	2,071	2,505	2,312	3,312	2,806	3,274	2,818	3,020	2,720	3,175	2,099	2,558
TEST RESULTS	BALLISTIG.	Vork of Runture (Inch—don)	120.8	103.0	117.2	101.1	120.6	100.3	163.2	115.6	2002	130.0	207.3	111.0	180.4	136.0	202.3	137.0	100.0
YARN TO	Ä	Counts Actual.	20.3	10	20.2	23.5	15.8	19.6	16.0	20.0	15.8	20.1	15.8	10.0	16.9	0.02	15.7	10.7	24.0
		Count-Strength Product,	1,275	1,324	1,200	1,206	1,090	520	1,507	1,281	1,800	1,630	1,031	1,580	1,578	1,671	1,816	1,011	1,576
	LEA.	Cedf) dianotis	5.5	56.1	63.3	20 0	69.4	20.0	2.10	63.0	111.8	81.0	107.1	80.3	03.0	79.8	114.2	82.0	8.99
		Counts Actual.	20.1	93.¢	10.0	23.7	15.2	10.5	16.0	20.1	10.3	10.0	15.7	19.7	16.0	6.08	15.0	10.8	23.0
	<u> </u>	Turns per inch.	17.08	10.73	17.08	10.73	15.97	17.08	15.07	17.08	15.07	17.98	15.07	17.98	15.07	17.08	15.07	17 08	10.73
07.1ng.*		Draft.	5 95	6.07	5.81	6.13	5.33	5.33	5.53	6.22	5.64	5.05	5.54	6.05	5.55	6.78	5.55	5.10	0.10
e Particulus	.K.g	Spindle Speed, R.	0,100	8,900	006,0	8,800	8,200	8,000	8,250	0,250	8,700	9,500	8,800	8,500	8,800	0,500	9,650	0,700	9,700
RENG FRANE	'po:	Front Roller Sp. R. P. M.	100	160	180	159	181	166	102	188	55	101	200	180	801	104	Si Si	200	178
<b>E</b>	per nour.	Yarn Breakest per l		r	133	118	152	613	9	S.	ន	91	77	2	일	97	•	0	77
2		f.seo.I laso.T	16.8	:	17.0	:	17.2	:	20.1	:	19.4	:	13.8	:	24.0	;	17.3	:	-
Waste Percentages		seo.1 Salanig	0.6	:	0.0	:	0.0	:	0.3	:	0.3	:	0.4	:	0.3	:	0.3	:	;
an Pr		Catd Room Loss.	11.0	:	11.4	:	10.0	:	13.3	:	13.8	;	9.5	:	18.3	:	10.8	:	:
# TF		Blow Room Loss.	5.9	:	5.8	:	6.9	:	7.5	:	6.3	:	4.4	:	6.8	;	2.0	:	$\overline{\cdot}$
	(Ipar)	olgmas to digioy/	21		ន		ន		ន		10		10		10	į	10		
		Counts Nominal.	S	ã	ន	ä	92	ន	22	8	10	ន	16	ឧ	10	8	16	20	70
		Date of Spirming.	17-8-31	18-8-31	20-7-02	21-7-32	20-8-33	30-8-33	5-9-34	£-6-3	9-0-85	10-9-35	7-10-36	8-10-38	15-7-37	14-7-37	20-0-38	20-0-38	30-0-38
		Sergon,	1930-31	1030-31	1031-32	1931-32	1932-33	1932-33	1033-34	1933-34	1034-35	1934-35	1935-36	1935-36	1936-37	1930–37	1937-38	1937-38	1937-38
-		Cotton	Karunganni.	Karunganni.	Karungannl	Karunganni.	Karunganal.	Karunganal.	Karungunul.	Karungannl.	Karunganul.	Karunganni.	Karmgamı	Kanınganıl	Karunganni.	Karunganni.	Karunganni.	Karunganni.	Karunganof.
		Sample No.	1100	1160	1399	1399	1805	1895 H	2476 H	2476 E	2813	2843	3383 E	3393 E	3700	3700	4259	4259 I	4259

• Diameter of ring frame front roller—[f. Diameter of rings—14".

<sup>†</sup> It is to be noted that the total loss is for a small sample weighing 10 ibs.; for bulk sample spun nader mill conditions it would be less than shown bere.

### 24.—A. R. KAMPALA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, r inspection and approval by their Special Appeal Committee on African Cottons in rdance with an arrangement made with the Association to supply to the Technological pratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.
1130	A. R. Kampala (K.L.A.)	1930-31
1498	A. R. Kampala (K.L.A.)	1931-32
1898	A. R. Kampala (K.L.A.)	1932-33
2464	A. R. Kampala (K.L.A.)	1933-34
2848	A. R. Kampala (B.K.T.)	1934-35
3396	A. R. Kampala (K.L.A.)	1935-36
3675	A. R. Kampala (K.L.A.)	1936-37
4105	A. R. Kampala	1937-38

I.—SPINNING TESTS.

### Treatment :-

- (a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). The 1930-31 sample was passed only once through the Crighton.
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).
- (b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

  1934-35 onwards:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### Spinning Master's Report :-

### (a) Cotton:

				Kani	PALA.			
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1035-36,	1930-37.	1937-38.
	White to crea- my-white; bright.	Creamy-white ; brightish.	White; bright.	White to creamy-white; bright,	White to creamy-white.	White to ercamy-white; brightish.	Creamy-white to white; bright.	White to creamy-white,
BP	Clean.	Very clean.	Clean.	Clean.	Clean.	Clean	Very clean.	Very clean.
	Good slik).	Good silky.	Good sliky.	Smooth badied	Good Smooth,	Good sliky.	Good bodied.	Soft.
& neppine28	Trific too knotted and nepped.	A little knotted.	Somewhat knotted.	Well-ginned.	Well-glaned.	Well-ginned.	Well-gluned.	Well-glaned.
••								i
er	Clean.	Clean.	Clean and silky	Clean.	Clean.	Clean.	Good ; clean,	Clean.
ъ.,	Fairly neppy.	A little neppy.	A little neppy.		: 1	Good.		Fairly free of nep.
t 10 flat etrips	19 3 gram«.	19.2 grams.	21.6 grams.	25.2 grams.	14.2 grams.	12.7 grams.	14.0 grams.	16.4 grams.
• •• ••	••			••			••	••1

### (b) Yarn:—

					Kan	PALA.			
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-30.	1930-37,	1937-38.
	 	Clean. Even. Somewhat nep- py.	f	Very even.	Clean. Very even. Fairly neppy.	Very oven.	Clean. Very even. Somewhat nep-	Even.	Almost clean. Even. Fairly free of nep.
_	<u> </u>	 <u> </u>			••			٠.	••

Spinning Test Details and Results: - See Table 24 on page 72.

II.—REPORT OF THE SPECIAL APPEAL COMMITTEE FOR AFRICAN A. R. KAMPALA COTTON.

Contract valued under   Cont								Kanpala	.3			
F. G. M. G. Broach F. G. M. G. Broach F. G.  No. 2. April/Alay No. 2  1933 delivery.  103 delivery.  No. 2. April/Alay No. 2  1933 delivery.  No. 2. April/Alay No. 2  No. 2. April/Alay No. 2  1 1/16'.  1 1/16''.  1		ł			1930-31.	1031-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937.38.
Fully good to fine.   Fine to the to the total	Contract valued under	l	:	:	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, April/May 1933 delivery.	F. G. M. G. Broach No. 2, July/August 1033 delivery.	F. G. M. G. Broach H. C. No. 2, July/ August 1934.	F. G. M. G. Brouch H.C. No. 2, April / May 1936 delivery.	F. G. M. G. Broach H.C. No. 2, April/ May 1937 delivery.	F. G. M. G. Broach H. C. No. 2, July/ August delivery.	F. G. M. G. Broach H. C. No. 2, July/ Aug.1938 delivery.
	Class	:	:	<b>:</b> .	Superfine.				Strict fine.	Barely fino.	Fine.	Barely fully good.
	:	:	:	:		Bright creamy-white				Creamy-white.	Creamy-white.	Whitish.
Good.   Fair.   Good.   Good.   Regular.		:	:	:	1 1/16".		Š			1 1/32".	Full 1 1/16".	1 1/16".
Regular.   Regular.		:	:	:	Good.					Moderate.	Normal.	Barely good.
low contract rate Rs. 115 on. Rs. 112 on. Rs. 14 Rs. 177. F. G. M G. Broach F. G. 1933 delivory, ust Rs. 218. Rs 16-7-31. 5-10-32. 7-8-33		:	:	:	Regular.					Not quite so regular as Busoga.	Regular.	Slightly irregular.
Hs. 177. F. G. M. G. Broach F. G. M. C. Broach F. G. No. 2, April/May No. 1933 delivery, usb Rs. 218. Rs. 218. T.8-31.	Value above or below	contra	ct rate		Rs. 115 on.		146 on.		Rs. 128 on.	Rs. 136 on.	Rs. 102 on.	Rs. 107 on.
16-7-31. 5-10-32. 7-8-33. 15-8-34. 20-8-35.	:	:	:	:	Rs. 177.	F. G. M G. Broach No. 2, April/May 1933 delivery, Rs. 218.	F. G. M. G. Broach No. 2, July/Aug- ust 1933 delivery, Rs. 205.	F. G. M. G. Broach H. C. No. 2, July/ Aug.1934 delivery, Rs. 223.	F. G. M. G. Broach H.C. No. 2, April/ May 1936 delivery, Rs. 194.	F. G. M. G. Broach H.C. No. 2, April/ May 1937 delivery, Rs. 221.	F. G. M. G. Broach H. C. No. 2, July/ August delivery, Rs. 224.	F. G. M. G. Broach H. C. No. 2, July/ August 1938 de- livery, Rs. 141.
	Date of Valuation	:	:	:	16-7-31.				20.8.35.	28.0-36.	16-6-37.	8.6.38.
Remarks* Good Sample Staple weak. 1/12 off A. R. Kam-Neppy.		:	:	:	:	Good Sample.	:	:		1/12 off A. R. Kam- pala Box.	Neppy.	:

\* The difference between ' Pass' and ' Rejection' standards in 1935-36 is Rs. 7,

27	<b>#</b> Pr	1	Testing Room.	22	22	83	8	67	10	20	10	70	잁	87	9	81	ę.	<b>!</b> :	67	20	g	99	55	18	20	1:	31	81	. 92
93	Kelativr Humdity (%).	-	.moon Zalanige		6	- e:	89	g	0.7	22		26	<u>۾</u>	ـــــــــــــــــــــــــــــــــــــ	 ;;	21	_ او	1:	20	   <sub> </sub> ;	 13		5.5	- 8:		15		33	 E
		<u> </u>								_		_	 	_							_			_		_	_		
63	Artone (°F).		mooM galaniq2	87	P. S.	2	86	-	8	92	'Z	8	8	80	FG	2	12	<del>7</del>	2	T.	£	20	80	8.	80	3.5	£,	- 8	87
ನ			Turns per inch. Actual.	17.2	19.19	21.6	17.2	21.3	21.2	17.3	#1.1	류	17.1	20.7	5.5	27.1	1:1	77	13.	20.9	- 	20.0	10.8	22.0	£3.8	17.3	19.6	51	26.1
ន			Neps per yard.	ci ci	17 T	5.5	C1	ei ei	3.0	1.3	1.5	1.9	8.13	<u>e1</u>	61 61	<del></del>	0.8	0.3	0.8	12	3.0	\$1 80	0.8	9.8	1.0	1.0	1.5	9.8	1.0
<b>61</b>			Li enners Class.	51	_	1.5	~	+	13	#1	**	-	21	e	-	17	ຕ	-	13	7	_	2	-	13	0	¢1	67	7	°
ត	OLTS.		Count-Work frequet	1686	3101	3169	1001	3150	2910	36.3	3320	3272	3917	37.15	3156	2603	1276	3130	2000	3211	32.0	3230	3231	3332	3320	1007	3325	1010	3181
96	YARN TEST RESULTS.	Ballestic	-quA to stoW ( dl-d'ad) otus	201 8	107.2	80.2	103.1	109.2	71.2	178.8	111.6	81.0	103.1	103.1	0.5	8. 10.30	104.0	0.7	51.8	101.12	50.2	62.0	105.0	81.0	0.7.6	203.6	111.2	78.6	91.1
g	YARS		Counts letual.	10.3	20.8	30.5	20.0	29.3	30.3	9.02	8.05	30.0	20.3	20.0	33.10	1.01	39.1	20°	20.0	31.1	10.	62.1	30.0	39.9	50.7	20.1	20.0	<b>40.</b> ¢	40.1
138			Count-Strength Product.	8	1949	1730	2153	1870	1567	15.43	1077	1664	2196	1971	1720	1551	1010	3)	1508	1941	1776	1548	1004	1945	1620	1225	1991	1743	1577
12		LEA.	derength (lbs.)	115.0	97.3	13.8	100.0	63.1	3.2	1.10	5.4	41.1	109.7	5.7	11.1	31.2	01.0	5.7	30.1	61.2	13.3	31.1	0.80	47.3	32.8	113.7	67.0	<u>.</u>	30.8
8			Counts Actual	10.5	29.0	39.5	20.3	20.5	10.5	30.0	30.3	10.3	20.2	30.0	39.10	40.7	1.62	30° t	50.1	30.0	10.1	50.5	30.8	39.0	40.4	20.0	20.02	41.1	51.2
22			Turns Der inch.	17.09	21.80	82 SB	17.03	91.80	25.43	17.03	93 15	95.9 <del>3</del>	17.04	21.80	9	23.10	95.12	3	23.16	21.80	25.23	23.16	20.74	23,79	26.75	17.08	20.71	93.70	26.75
=	CULARS.		Draft.	5.	0.70	8.03	5.81	0.41	8.07	0.07	0.63	A. 02	5.03	0.03	8.71	10.19	2.06	7.97	10.10	7.11	7.81	10.00	5.	8.67	9.81	6.35	6.50	8.80	11.01
13	FRIUS PARTICULADS		Spindlo Speed, R. P. M.	9750	9650	020	0800	0200	0200	0000	9630	0650	1000	10000	0000	10000	0220	0000	0036	10 300	10400	10100	10200	10300	10200	10300	10400	10100	10500
22	RING FR	ecd,	Front Roller Sp R. P. M.	105	159	133	100	162	130	195	160	133	202	163	111	131	160	138	126	173	110	134	180	121	134	213	185	103	11
Ħ		190	Yarn Brenkages yer 100 spindles yer hour,	ន	e	Œ.	0	0	18	11	77	13	s	0	eı	7	Į.	12	=	9	c	2	67		52	u)	ដ	일	ဌ
ä	0E8.		Tead InfoT	15.3	:	:	1.7	:	:	17.1	:	•	17.1	:	:	:	12.0	:	:	11.0	:	:	11.0	:	:	14.0	:	:	<u>:</u>
	Pencentages.	_	Splaning Loss.	1 0	:	:	6	:	:	9.7	:	:	9.	:	:	:	0,3	:	:	9.5	:	:	0.3	:	:	e.	:	:	<u>: </u>
8	WASTR P		Card Room Loss.	10.3	:	•	2	:	:	20.0		:	12.0	:	:	:	8.6	:	:	8.3	:	:	8.1	•	:	10.1	:	:	<u>:</u>
	<b>E</b>		Blow Room Loss.	1:1	:	:	3.0	:	:	3.	:	:	6.0	:	:	:	3.1	:	:	7.	:	:	ei ei	:	:	<u>:</u>	:	:	<u>:</u>
•	_	(1ps )	Velght of Sample	2			2			2			2				2			9			2			9			
ç	<u> </u>		Counts Nominal.	ន	8	2	ន	8	\$	ន	8	Q.	ಜ	ន	9	2	<u>ន</u>	\$	ĵ.	30	9	ខ	8	2	ន	ឧ	ខ	2	3
-	_		Date of Spinning.	29-7-31	29-7-91	30-7-31	10-10-33	10-10-32	11-10-32	5-0-33	9-9-33	9-9-33	31-8-34	31-8-31	31-8-34	30-8-31	10-9-35	11-9-35	13-0-35	0-10-30	12-10-30	13-10-36	20-0-37	25-6-37	25-6-37	21-0-38	22-0-38	82-0-38	29-0-38
63		_	Beason.	1030-31	10:30-31	1930-31	1031-32	1031-32	1931-32	1032-33	1032-33	1932-33	1033-34	1033-34	1933-34	1933-34	1031-35	1034-33	1034-35	1935-30	1035-30	1036-36	1930-37	1030-37	1030-37	1937-38	1937-38	1037-38	1037-38
c			Cotton.	Kampala.	Kampala	Kampala.	Kampala	Kampala	Kampala.	Kampaln	Kampala	Kampala	Kampala	Kampals	Kampala.	Kampala.	Kampalo	Kampala	Kampala	Kampala	Kampala	Kampala	Kampala	Kampala.	Kampala	Kampala, .	Kampala	Kampala	Kampala
• •			Samplo No.	1180			i			Ť			ï	2104 K	2104 K	. 2464 K	2848 K	2848 K	2848 K	3790 K	3300 E	339¢ K	3675 K	3075 K	i				4105 K

Table 24.—SPINNING TEST RESULTS FOR KAMPALA COTTON.

\* Diameter of ring frame front frame front roller-17. Diameter of rings-12.

### 25.—A. R. BUSOGA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, inspection and approval by their Special Appeal Committee on African Cottons, in lance with an arrangement made with the Association to supply to the Technological atory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.
1131	A. R. Busoga (K.G.I.)	1930-31.
1499	A. R. Busoga (N.S.S.)	1931-32.
1897	A. R. Busoga (K.A.L.)	1932-33.
2463	A. R. Busoga (N.W.D.)	1933-34.
2847	A. R. Busoga (K.A.L.)	1934-35.
3395	A. R. Busoga (N.S.S.)	1935-36.
3674	A. R. Busoga	1936-37.
4104	A. R. Busoga	1937-38.

### I.—SPINNING TESTS.

### Preatment :--

**(b)** 

(a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). The 1930-31 sample was passed only once through the Crighton.

1934-35 onwards:—Hopper bale opener, Horizontal Cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### Spinning Master's Report :—

(a) Cotton:—

	ia i				Busoc	٨.			
	7	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1036-37.	1937-38.
••	<u>.</u>	Creamy-white ; very bright.	Brightish creamy- white.	White to croamy- white; brightish.	Creamy-white ; bright.	Creamy-white ; bright.	White to creamywhite; brightish.	Creamy-white ; bright.	Creamy-white.
s ,.	••	Clean	A few spots of stain.	Fairly clean	Clean	Clean	Clean	Clean; an occa- sional stain.	Very clean,
	••	Soft and silky	Soft silky	Soft sliky	Smooth-bodled	Silky	Good sliky	Good silky	Soft; silky.
nd nep	piness	Knotted and nepped.	Somewhat knotted.	Fairly well- ginned.	Fairly knotted.	Well-ginned	Well-ginned	Well-glaned	Well-ginned.
		Too much cut		••	••				••
r		Clean	Clean	Silky, bright and clean.	Clean	Clean	Clean	Good ; clean	Soft ; clean.
	••	Much too neppy and uneven.	A trifle neppy.	Good	A little neppy.	Good	Good	Good; full; free of neps.	A little neppy.
10flat	strips.	20.7 grams	18.4 grams	20.1 grams	22.5 grams	19.6 grams	14.4 grams	14.0 grams	18.3 grams.
	••			••	••	••		••	••
		<u> </u>	<u> </u>				<del></del>		

### (b) Yarn:—

					Dusoc	β <b>Δ.</b>			
		1930-31.	1931-32.	1032-33.	1933-34.	1034-85.	1035-36.	1936-37.	1937-38,
s	•					l :		_	Clean.
••	••	Even	Very even	Very even in the two lower counts.		Even			Even.
٠	••	Fairly neppy	A little neppy.	Almost free of nep.	Fairly noppy	Fairly noppy	Neppy	Slightly neppy.	Almos free of
••	••				••	••	••	••	::

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Spinning Test Details and Results:—See Table 25 on page 75.

II. REPORT OF THE SPECIAL APPEAL COMMITTEE FOR AFRICAN A. R. BUSOGA COTTON.

•										Busoca.	JGA.			
			1		1	1930-31.		1031-32.	1032-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
•	Contract valued under	i under	: '	: :.	<u> </u>	G. M. G. 1	Bronch	F. G. M. G. Broach F. G. M. G. Broach No. 2, April/May 1933 delivery.		F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach I. G. Broach F. G. M. G. Broach	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery.	F. G. M. G. Broach Hedgo Contract No. 2, April/May 1937 delivery.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug.	F. G. M. G. Broach Hodgo Contract No. 2, July/Aug. 1938 delivory.
	Class	:	:	:	. Sanga	Superfine	:	Fully good	Fino	Fully good to fine Strict fine	:	Fine	Barely fine	. · Fins.
-	Colour	:	:	:	White	:	•	Creamy-white	Dull-white	. Dull-white and erea-Creamy-white my.		Creamy-white	Creamy-white	Creamy-white.
	Staple Length	:	:	:	1 1/8	8/	:	1/16"	1 1/16"	1/16″	Full 1 1/16"	1 1/16"	in the second se	1 1/16".
	Staple Strength	:	:	:	Good			Fair	pood	Good	Good	Good	Good	Good,
	Regularity	:	·:	:	Regular	ular		Rather irregular	Fairly rogular	Rogular	Rogúlar	Regular	Slightly irrogular Good.	. Good.
<b>'</b> ;	Value above or below contract rate	below e	ontrac		: Rs.	Rs. 110 on	:	Rs. 105 on	Rs. 138 on	Rs. 137 on	Rs. 127 on	Rs, 135 on	Rs. 188 on	Rs. 105 on.
	Brais	:	.:	:	Rs. 177	171	•	F. G. M. G. Broach No. 2, April/May 1033 delivery, Rs. 218,		G. Broach Contract July/Aug. delivery	F. G. M. G. Broach F. Hedge Contract No. 2, April/May 1936 delivery,	F. G. M. G. Broach Hedge Contract No. 2, April/May 1937 dolivery,	F. G. M. G. Broach Hodgo Contract No. 2, July/Aug. dolivery, Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1938, delivery,
	Date of Valuation	ų	`:	:	16-7-31	31		6.10-32	7.8.33	Ks. 223.	14. 194. 27-8-35	rs. 221. -9-36	16-6-37	8-0-38.
	Remarks *	:	:	:		:		Fair average sample.	:-	:	:	Pass A. R. Busoga.	:	Ξ

The difference between ' Pass' 'and Rejection' standards in 1035-36 is Rs. 7.

COLTO	8
ຽ	10
RESULTS FOR BUSOGA (	13
BI	17
FOR	10
ULTS	22
RESI	<b>†</b> 1
TEST	13
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SPINNING	11
7	2
25.	6
able	æ

TEMPER - RELATIVE ATORE HOSIDITY (%).	acp.	troq sqo% is a sqown in a sqown i	87	5.5 20.0 86 70	5.6 24.3 80 78	17.3 80	2.2 21.2 88 , 63	2.8 24.6 87 67	1.0 17.3 80 74	1.8 21.2 87 74	1.5 24.4 80 75	1.8 17.1 80 70	1.5 20.0 86 71	4.8 24.0 80 70	1.0 26.0 80 73	1.5 21.0 85 71		3.8 27.1 83 70	3.5 20.0 87 71	4.2 21.0 88 72		2.2 10.8 86 76	23.0 87	25.8	1.0 10.8 80 71	23.1 80	
	-Faci	Work Product, Evenness C	3956	3419 4	3238 5	3868	3381 3	3168	3735	3102 3	2327 6	3803	3118 3	3002	2565 5	3490	3001	5034	3352	3103	3383 5	3180	3303		3185 3	3247 3	
YARY TEST RESULTS	Ballistic,	Work of Rupture (Inch-lb.) Count- Work	109.8	113.6 3	82.6	184.8	118.2 3	70.8	185.8 3	111.6 31	61 01 E-	180.4	104.6	75.4 30	51.0	114.8	80.8	60.5	106.4 3			103.2	83.0 38		105.8 31	82.0	-
Yaax		County Actual.	19.8	30.1	30.3	20.9	28.0	39.7	20.1	28.6	38.1	20, 1	30.1	41.0	50.3	30.1	40.1	48.6	31.5	40.0	50.8	30.0	30.8	50.9	30.1	39.6	_
		Count- Strength Product.	2276	2025	1720	12.52	2022	1781	1700	1886	1441	953	1994	1077	1534	2006	1819	1637	1015	1975	1730	1921	1915	1766	¥905	1838	_
i	LEA.	Strength (lbs.)	117.3	69.1	1:1	100.0	70.7	12.1	85.0	8.10	37.9	111.3	65.8	40.8	31.0	88.4	10.4	32.8	71.8	20.0	35.1	7.75	1.01	35.1	68.0	16.3	-
		Connts Actual.	10.4	20.3	39.0	20.7	28.6	30.5	10.9	29.1	38.1	30.3	30.3	41.1	10.5	30.3	30.2	40.0	30.6	39.5	40.3	30.3	30.0	20.0	30.2	39.7	
	-top	Turns per l	17.08	21.80	8 8	17.98	21.86	83.33	17.98	21.80	<u> </u>	17.98	21.80	35.28	28.16	21.86	8 8	38.10	21.86	8.9	28.10	20.71	23.79	20.75	20.74	23.70	
e Particolars.		Dealt.	5.73	0.07	8.83	5.05	6.38	8.83	6.93	6. 17	۳ ت	18.2	6.47	8.55	10.13	7.79		10.00	7.		9.81	8.00	7.73		7.7	7.71	_
	, bound	Splindie L.Y.A.	0730	0020	9700	00.00	9700	9700	9050	9600	9020	986	9900	0000	0000	9650	9550	0000	10350	10400	10350	10200	10300	10200	10400	10400	
RING FRAN	Roller P. M.	Front Speed, R,	105	150	138	190	163	139	198	160	38	503	166	1114	131	101	138	- F	121	118	136	180	154	134	185	164	
	eogra eollog	Yarn Brea per 100 spl per hour.	<u>୍</u>	=	<u> </u>		2	29	88	33	đ		es	<u>~</u>	61	£;		ল		0	r3	ឡ	임	67	6	13	
LAGES.		reso.I leto.T	0.0 17.4	:	: 	0.4 15.3	:	:	0.5 17.1	:	:	0.2 16.3	:	:	:	0.4 15.4	: 	:	0.3 13,2	: 	;	0.4 13.0	:	: 	0.4 13.8	: 	_
WASTE PERCENTAGES		Card Room. Spinning Lo	12.3 0.	:  :	: :	9.0	:  ;	: :	10.0	:  :	: 	11.1	;	:  :	: ]	11.7 0.	: :	:	9.5	:  :	:	8.2 0.	:  ;	: :	10.1	: - :	_
WASTE	-	How Room	5.3 1	:	:	6.0	:	:	2.2	:	;	£2	:	:	:	3.8	:	:	3.8	:	:	4.8	:	:	3.8	:	_
, ('adı	्रावेत्वर	Neight of 8	8			ខ			10			2		_		2			e e			10			2		_
,	.lank	nok stanod	8 		<b>\$</b>	<u> </u>	30	ş 	ន	8	<b>P</b>	8	30	<b>9</b>	05	30		8	8	2	09	8	9	8	8		
	·Sajac	Date of Spli	- 29-7-31	20-7-31	30-7-31	12-10-32	11-10-32	11-10-32	3 5-9-33	3 5-9-33	8-9-33	18-8-31	4 28-8-34	1 20-8-34	1 30-8-31	38-9-35	5 16-9-35	5 13-9-35	0 9-10-36	0 10-10-30	0 14-10-30	7 23-6-37	7 24-6-37	7 24-6-37	3 18-6-38		8 90.0
,		Thomas and the second	1830-31	1030-31	1930-31	1931-52	1931-32	1031-32	1932-33	1932-33	1032-33	1933-34	] 1933-34	1933-34	1933–34	1934-35	1934-35	1934-35	1035-36	1935-36	1935-36	1936-37	1936-37	1936-37	1837-38	1937-38	1027_78
,			Busoga .	Busogn .	Busoga .	Busoga .	Busoga	Busoga .	Buroga	Busoga	Busoga	Busoga	Busoga	Визоди	Busoga	Busoga		Busoga	Busoga	Busoga	Busoga	Busogn		Busoga			Buscon
	1	No.	1131	1131	1131	1400	GúfI	1199	1307	1897	1897	2463	2463	2:63	2463	2847	2847	2847	3395	3395	3395	\$49°	3674	3674	+104	<b>†10</b> †	£10£

### 26.—A. R. JINJA COTTON.

These samples have been very kindly supplied by the East India Cotton Association and approval by their Special Appeal Committee on African Cottons, cordance with an arrangement made with the Association to supply to the Techcical Laboratory, for testing, samples of fair average Cotton of the commercial crop.

Sample No.	Cotton.	Season.
1133	A. R. Jinja (K.I.G.)	1930–31
1500	A. R. Jinja (K.U.M.)	1931-32
1896	A. R. Jinja (A.R.A.)	1932-33
2462	A. R. Jinja (R.N.P.)	1933-34
2846	A. R. Jinja (S.R.I.)	1934-35
3394	A. R. Jinja (S.R.I.)	1935–36
3702	A. R. Jinja	1936-37
4106	A. R. Jinja	1937-38

I.—SPINNING TESTS.

### reatment :---

(b)

(a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times); the 1930-31 sample was passed only once through the Crighton.

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. I.

1934-35 onwards:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. I possesses a band drive arrangement.

pinning Master's Report :—

(a) Cotton:—

	;				Jinj	A.			
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
	•	Creamy-white ; bright.	Creamy-white.	White to crea- my-white; brightish.	White to crea- my-white; bright.	White to crea- my-white; bright.	White to crea- my-white; brightish.	Creamy-white to white.	White to creamy white.
55	••	Fairly clean.	Fairly clean.	••	Clean.	Fairly clean	Clean.	Very clean.	Clean.
	••	Soft and sliky.	Good softish.	Soft sliky.	Good silky.	Good silky.	Good silky.	Good silly.	Good soft.
and	nep-	Too much knot- ted and nep- ped.	Somewhat knotted.	Fairly well- ginned.	A little knotted	A good deal knotted and nepped	Well-ginned.	Well-ginned.	Well-ginned.
cr		Clean.	 Clean.	Silky, soft and	Clean.	Clean.	Clean.	Good ; clean.	Occasional un- doveloped. Fairly clean.
ъ		Too neppy.	A little neppy.	Good.	Cloudy and neppy.	Somewhat neppy	Good.	Good ; nep-free.	Fairly free of nep.
of 10	) fint	20.9 grams.	18,3 grams.	19.5 grams.	26,2 grams.	19,5 grams.	17.0 grams.	16.1 grams,	15.3 grams.
·	••					<b>l</b>			••
(l	<del>)</del>	Yarn :	<u> </u>	<del>· _</del>	<u>'                                      </u>	<u> </u>	1	<u>'                                      </u>	<del>'</del>

					J <sub>I</sub> <sub>N</sub>	JA.			
		1930-31.	1931-32.	1932-33.	1933-84.	1934-35.	1933-36.	1036-37.	1937-38.
55		Fairly clean.	Clean.	Clean.	Clean.	Fairly clean.	A triffe leafy.	Clean.	Almost clean.
••	-	Even.	Even.	Very even.	Even.	Even	Fairly even.	Fairly even.	Eren.
s	••	Neppy.	Somewhat neppy.	Practically free	Fairly neppy.	Neppy.	Neppy.	Fairly free of nep.	Pairly free of ncp.
15	•••	"	••			Occasionally slubby.			
-	• ••				<b>!</b>				

Spinning Test Details and Results:—See Table 26 on page 78.

# II.—REPORT OF THE SPECIAL APPEAL COMMITTEE ON AFRICAN COTTON, A. R. JINJA.

						Jinja.				
			1930-31.	1931-32.	1932-33.	1933-34.	1034-35.	1935-36.	1936-37.	1937-38.
Contract valued under	:	:	1	F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Bro. No. 2.  No. 2.  1933 delivery.	F. G. M. G. Broach No. 2, July-Aug. 1933 delivory.	F. G. M. G. Broach Hedge Contract No. 2, July-Aug. 1934.	F. G. M. G. Broach Hedge Contract No. 2, April-May 1936 delivery.	G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. July-Aug. Hedge Contract Hedge Contract Hedge Contract Hedge Contract Hedge Contract Hedge Contract Hedge Contract Hedge Contract Ilvory. 1934.	F. G. M. G. Broach Hedgo Contract No. 2. July-Aug. delivery.	F. G. M. G. Broach Hedge Contract No. 2, July-Aug. 1938 delivery.
Class	:	:	Fino	Good to fully good . Fully good to fine		Fine	Fully good to fine . Fully good	:	Superfine	Fine.
Colour	:	:	Creamy	Rather dull with!	with Dull; somowhat Creamy-white		Creamy-yellow	Dull and creamy	Creamy-white	Creamy-white.
Staple Length	:	:	About 1"		1 1/16"	1/16"	1 1/32"	1 1/32"	1 1/16"	1 1/16".
Staple Strength	:	:	Fair	Fair	Good	Good	Fair	Good	Good	. Good.
Regularity	:	:	Fair	Irregular	Fair	Fair	Slightly irregular Regular	:	Regular	Good.
Value above or below contract rate	ontract r	ato	Rs. 100 on	Rs. 90 on	Rs. 132 on	Rs. 135 on	Rs. 120 on	Rs. 128 on	Rs. 185 on	Rs. 99 on.
Dagis	:	:	Rs. 189	F. G. M. G. Broach F. G. M. No. 2, April-May No. 2, 1933 delivory, 1933 Rs. 218.	F. G. M. G. Broach I No. 2, July-Aug. 1933 delivory; Rs. 265.	F. G. M. G. Broach Hodge Confract No. 2, July-Aug., 1934 delivery, Rs. 223.	F. C. M. G. Broach Hodgo Contract No. 2, April- May 1036 dolivery, Rs. 194.	G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach F. G. M. G. Broach July-Aug. Rodge Contract Hedge Contr	F. G. M. G. Broach Hedge Contract No. 2, July-Aug. delivery, Rs. 208	F. G. M. G. Broach Hedgo Contract No. 2, July- Aug. 1938 delivery, Rs. 141.
Date of Valuation	:	:	24-7-31	5-10-32	7-8-33	15.8-34	27.8-35	28.0-36	6-7-37	8-6-38.
Remarks .	:	:	:	Poor samplo	:	:	;	Rs. 5/4 off A. R. Jinja Pass.	R. Botter than average quality.	: . :
_				* The difference between ' Pa	tween ' Pass' and ' R	ss' and 'Rejection' standards in 1935-36 is Rs.	in 1935-36 is Rs. 7.		-	

	,	,	-	£7	9	t-	60	۵	2	11	21	13	14	2	30	17	18	19	20	ä	뙲	ล	24	អូ		13
- -	•1		•	,		¥ 	Wastn Pracemttors	ROPETA	2.5		RING ED	LAME PAI	LAME PARTICULARS.					MVX	YANK TEST RESULTS	ESULTS.				LENPER- ATURE (*F),		HELATIVE HOMOSITY (%).
<del></del>					(3par)	1				DCI DCI	cog.					LEA.			BALLIBTIO,						<u> </u>	
Sample No.	Cotton.	Sea to B.	Date of Splaning.	Counts Nominal.	Welght of Sample	Blow Room Loss	Card Room Loss.	Spinning Loss.	Total Lots.†	Yarn Breakages 100 spindles hour.	Front Roller Sp R. P. M.	Spindle Speed,	Draft.	Tutns per meh	Counts Actual	Strength (lba.)	Count-Strength Product.	Counts Actual.	Work of (Inch-1bs).	Count-Work Product.	L'vonness Class.	Reps per yard.	Turns per inch. Actual.	mooA zalaaig&	unooff Balandg	Testing Room.
	-	10.000	2-31	ទ	2	5.3	11.9	60	10.2	•	196	9700	6.07	17.08	10.7	100 3	2153	20.1	185.0	3731	¢1	61		3	83	88
	1 1 1	1040-31	31-7-31	8		:	:	:	:	۲-	160	0020	6.80	21.80	8.8	64.8	1852	12	105.0	9118		7.0		_	80	20
	Tinto	1090-31	31-7-31	2			•	:	:	13	138	9650	0.50	25.28	40.4	30.5	1681	40.4	71.8	3022	2	7.0	0.10	# 8	8	78
		1031-39	19-10-39	្ត	2	0	6	0	10.4	इ	961	9700	0 02	17.98	19.7	112.4	2214	10.0	192.0	3821	07	5.5	17.0	80	29	89
		1931-32	11-10-32	2			:	:	:	==	16.	9700	9.64	21.80	29.0	67.5	1098	29.1	119,2	3469					<b>6</b> 9	\$
		10.41-32	19-10-39	약			:	:	:	10	138	9770	8 70	25.28	39 5	43.0	1698	38.1	77.1	0762	-	9.9			일	ફ
-	١	10%-33	3.0 33	ន	2	6.0	8,6	9.1	15.5	88	561	9650	2 80	17.08	10.0	90.3	1707	20.6	175, 1	3590	C1				7.1	55
	Linia	1072-33	5-0-33	ន		:	:	:	:	es	160	0000	0.38	21.80	20.3	68.1	1007	를 일	114,2	3357	63	ei ei	31.1		7.2	22
	:	1032-33	8-0-33	2		:	:	:	:	¢1	138	9650	8.07	25,28	38.0	40.7	1583	39.1	79. 1	3128	*	1.6	24.3	98	23	8
ī	5	1003-34	16-8-88	ន	10	5 6	13.0	0.9	18.0	6	708	0060	6.05	17.98	20.3	112.7	996	8.0g	106.0	3029	C7	5.0	17.3	98	22	2
	- 트	1033-31	29-8-31	33		:	:	:	:	٥	166	0000	0.54	21.80	20.7	72.4	2150	20.0	115, 1	3410	C)				11.	
2462 Jinfa	<u>۔</u> چ	1033-34	20-8-02	2		:	:	:	:	10	141	0000	8.03	25.28		†: ::	1780	11.7	77.6	3230	-	 	21.6	98	2.	_
	-: -:	1033-34	30-8-34	S		:	:	:	:	ei	131	0000	10.19	28.10	51.3	32.3	1057	20.7	53.2	2097	r3	1.7	27.4	8	E	7,2
7	٤	1034-35	18-0-37	ន	ļ¤	0.5	11.6	6.	16.3	10	163	0200	7.05	91.86	30.7	67.0	2037	30.5	107.4	3270	3	5.5	50.7	28	8	
2816 Jinja	: \$	1031-35	16-9-35	2		:	:	:	:	81	138	0000	7.94	25.28	30.7	47.5	1880	39.6	1.00	3571	-7	5.0	24.3	**	& 	
Seld Mala	.: el.	1011-35	17-0-35	S		:	:	:	:	10	191	9000	10.20	23,10	51.6	31.0	1643	50.5	53.0	2670	1.2	5.3	20.0	- F	8	8
3304 Jinh	<u>:</u> چ	1035-36	8-10-30	ຊ	s	=	18.7	9.4	11.0	-	170	10300	7.35	21.86	31.0	70.0	2180	31.1	100.1	3403		1.0	21.9	88	2	_
3304 Jinj.	:	1033-36	10-10-36	2		:	:	:	:	^	148	10350	7.58	23.28	39.8	40.4	1000	39.3	80.4	3300	₩		7:10	88	얹	8
.394 Jinla	-: -:	1035-36	13-10-36	ន		:	:	:	:	10	138	10400	10.00	28.10	50.0	35.3	1780	50.8	00.1	3373	2	4 9	27.3	8,	71	99
3702 Jinla	<u>=</u>	1930-37	17-7-37	ន	6 C	4 01	0.7	9.4	13.0	23	183	10300	7.34	20.74	30.7	74.9	9278	30.0	103.2	3313	*	1.8	19.0	98	78	
3702 Jinja	:	1970-37	10-7-37	Ç		:	:	:	:	91	104	10300	7.73	23.70	38.7	63.8	2082	40.0	86.0	3410	1.2	e: 	- S	88	- 22	7.0
3702 Jinja	դա	1036-37	20-7-37	20		:	:	:	:	能	143	10300	10.00	26.75	\$.09	36.2	1824	52.1	66,4	3470	Φ,	1.3	25.0	88	70	20
	<u>ٿ</u>	1837-38	21-0-38	ន	10	8.9	10.2	0,4	16.6	0	210	10400	6.34	17.98	ន <u>.</u>	118,8	2400	ુ. ક	202, 6	1133	¢1	1,2	17.5	88	1.1	22
	-: -:	1037-38	23-0-38	ន		:	:	:	:	S	185	10400	6.31	20.71	80.2	70.7	2136	29.0	111.8	3308	e; 	1:0	20.3	87	12	- -
	-:- -:-	1037-39	23-0-33	약		:	:	:	:	-1	103	10400	8.39	8.3	20.2	£7.3	1878	30.4	82.0	3554	_		13.3	- &	72	
4106 Jinfa	-	1004				_																	•			

### 1.—FARM WESTERNS COTTON.

These samples have been tested by arrangement with the Bombay Millowners' ation, Bombay, who have very kindly agreed to arrange for the supply each season ples of the first arrivals of the new crop.

ple No.	Cotton.	Place.				Season.
L776	Farm Westerns	Bellary .		• •	• •	1932–33
2374	Farm Westerns	Bellary .				1933-34
2748	Farm Westerns	A 7 .			• •	1934-35
<b>3150</b>	Farm Westerns	Adoni .		.:	• •	1935-36
3507	Farm Westerns	Adoni .				1936–37
3966	Farm Westerns	Adoni				1937_38

### I. SPINNING TESTS.

reatment :---

(a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards: --Hopper bale opener, Horizontal cleaner, Crighton (once),

### **TECHNOLOGICAL REPORTS**

ON

### COTTONS SUPPLIED BY THE BOMBAY MILLOWNERS' ASSOCIATION.

These samples are the first arrivals of the new crop of each season. In view of the fact that sometimes a mill using a particular style of cotton in one season does not use the same style in the following season, a certain amount of discontinuity has occurred in some of the varieties. However, so far as possible, efforts have been made to obtain, in each season, samples of the same varieties so that the results of tests in the successive seasons may be comparable. As regards the valuation of these samples, this was kindly done by the Grader (Major Ellis Jones) upto 1931-32, but in the following seasons the mills supplying these samples were requested to furnish their own valuation reports.

trips	10	17.6 grams.	21.5 grams.	17.8 grams.	13.8 grams.	14.0 grams.	15.1 grams.
ks	••	••		••	••		••

### (b) Yarn:—

			_	FARM WEST	erns.		
		1932-33.	, 1933-34.	1034-35.	1935-36.	1936-37.	1937-38.
ness		Clean.	Leafy.	Cloan.	Almost clean.	Leafy.	A little leafy.
088	••	Fairly even.	Fairly unoven.	Even.	Fairly even.	Fairly even.	Fairly even.
1085	••	A little neppy.	A little neppy.	Almost free of nep.	Practically free of nep.	Fairly free of nop.	Fairly free of nep.
ness	••	••		••	•• `.	••	••

pinning Test Details and Results:—See Table 1 or page 81.

COTTON.	
REPORT* FOR FARM WESTERNS COTTON.	
OR FARM	
REPORT* F	
Cn Androis	
1	

	1937-38	1930-37	Trong Breach No.II.	Broach April/May.	Fine.	Brownish white.	. 13/16 inch.		Good.	Regular.	i d	m. Ks. 25 on.	Rs. 180.		2-3-38.	:			
Farm Westerns.		1935-36.		Broach April/May.   Broach A	Fine.		Brownish white.	7/8 inch. 29/32 meh.	Good.		Slightly irregular. Fair.	Rs. 30 on. Rs. 20 on.	ţ	Rs. 203.   Its. 221.	19-2-37.	.30-4-30.	•		in the mill supplying the sampio.
FARM		1934-35.		F. A. A. Brooch	July/Aug. Diogon	Fine.	White brownish.	19 /18 inch.	07/01	Good.	Remint.	Be 40 on.	Train Control	et Rs. 232.		3-7-35.	•		Indiament
		16 660	1933-34.		Broach.	Fine.	Tick brown.	Tigue promise	29/32 inch.	Good.	•	Good.	Rs. 25 on.	  - 000 Tules/Aum	F. G. Broach April/ Bs. 203 July/August	9-7-34.		:	
T			1932-33.		Hadge Contract No. 5	of M. C.	G000 11: C1:	White.	7/8 inch.	-	Moderate.	Slightly irregular.	Rs. 20 on.		F. G. Broach April	1 H 12 99	10-0-01	Inferior in staple to last year's crop.	1
						Contract valued under	Class	Colour		Staple Length	Staple Strongth	Rogularity	velue above or below con-	tract rate	Basis	•	Date of Valuation	Remarks	•

Table 1.—SPINNING TEST RESULTS FOR FARM WESTERNS COTTON.

		e1	ဇ	7	1.7	θ	2	8	a	ò	11	12	13	14	16	16	17	18	10	S	ផ	81 <b>8</b>	23	₹	33	8	23
•						(.ed	<sup>™</sup>	WASTE PERCENTAGES.	ROENTA	OES.		RING FRANK		Partioulars.*					Хчих	Test	Resours.				Trntrer- atore (°F).	Relative Humbity (%).	TIVB DITY ).
	٠.				1	io, (i	.81	.,			19Q 19Q	'poog					LEA.			Ballistic.					•	٠,	
, ' <i>j</i>	Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nomina	Welglib of Samp	Blow Room Los	Card Room Los	Splaning Loss.	Total Loss.†	Yarn Dreakages 100 spindles hour.	Fronk Roller Sp R. P. M.	Spindle Speed,	Deaft.	Turns per luch.	Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product,	Evenness Class.	Neps per yard.	doni 10g antuT Lauto!.	moon Balaalq2	mooN Zalaalq2	Testing Room.
•	1776	Farm Westerns.	1032-33	18-5-33	<u>ଶ</u>	10	11.2	10.0	0.0	20.0	<u>ಟ</u>	196	0,630	6.41	17.08	10.8	73.5	1,155	20.1	116.0	2,233	*	ei ei	17.1	88	80	55
•	1776	Farm Westerns.	1932-33	19-5-33	<b>#</b>		:		:	:	잃	174	0,400	6.32	19.73	2.8	5.1.5	1,202	6.	05.4	2,280	-4	ei ei	18.9	26	g	SS
•	2374	Farm Westerns.	1033-31	10-7-34	ន	2	15.0	11.0	9.6	23.6	92	961	009'0	6.07	17.08	10.0	60.1	1,381	19.7	117.8	2,321	*	1.5	17.0	87	22	92
	2374	Farm Westerns.	1933-31	11-7-34	<b>7</b>		:	:	:	:	ន	170	9,150	5.15	19.73	23.2	38.8	1,364	33.5	0.00	2,256	ניי	1.5	19.0	83	7.4	78
	2374	Farm Westerns.	1033-34	10-7-34	8 -		:	:	:	:	55	151	000'6	0.71	33.11	30.0	40.4	1,312	20.3	78.1	2,313	9	ei	23	28	<b>8</b>	08 08
•	2748	Farm Westerns.	1934-35	19-6-35	ន	2	11.3	9.6	0.6	8 8	ឥ	197	0,050	5.93	17.08	19.7	87.0	1,712	19.8	111.8	2,808	63	1.5	17.3	98	57	80
	27.48	Farm Westerns.	1934-35	19-6-35	ನ್		:	:	:	:	Ç	180	000,0	5.32	19.73	93.0	68.1	1,607	33.7	114.4	2,711	-#	1.5	10.1	98	55	5
	2748	Farm Westerns.	1934-35	20-0-35	8		:	:	:	:	8	150	9,500	6.71	23.11	20.3	4.55	1,535	20.7	¥.50	2,744	13	7.2	7. 81	æ	15	13
•	3150	Farm Westerns.	1935–36	93-1-30	S.	2	F.1	6.3	0.0	16.9	ŝ,	195	000,6	5.95	17.08	6. 6.	5.3	1,327	10.0	126.4	2,477	-	0.8	17.4	88	63	02
	3150	Farm Westerns.	1935-30	22-4-30	ä		:	:	:	:	73	170	000'0	5.64	10.73	94.0	14.8	3,116	24.6	104.0	2,548	4	8.0	7 9	88	99	5 <u>7</u>
	3150	Farra Westerns.	1935-36	21-4-30	<b>8</b>		:	:	:	:	8	140	8,730	6.76	33.30	30.5	30.8	1,214	30.0	78.1	2,352	13	1.0	13.1	8	g	20
•	3507	Farm Westerns.	1936-37	25-2-37	ន	2	10.9	8.5	7.0	18.2	ä	180	0,350	5.03	17.08	10.7	81.0	1,673	19.7	121.6	2,455	-	1.8	17.3	83	g	8
	3507	Farm Westerns.	1930-37	25-2-37	எ		:	:	:	:	13	170	0000	5.36	19.73	21.3	01.0	1,407	21.1	8.101	187	13	1.8	19.0	₹8	S	88
;	3207	Farm Westerns.	1036-37	26-2-37	8		:	:	:	:	11	148	9,350	0.67	23.26	30.1	18.1	1,48	29.7	ei .	2,111	9	1.6	20.1	8	2	8
ı	3968	Farm Westerns,	1937-38	11-3-38	ន	ន	10.0	9.1	0.5	18.0	ន	101	05+'6	3.81	17.93	20.3	73.5	1,470	50.0	118.1	9308	7	e:	17.3	23	g	g
	3966	Farm Westerns.	1937-38	11-3-38	7.		:	:	:	:	11	181	9,550	5.3	19.73	23.3	59.2	1,370	23, 1	102.4	9,390	+	1.5	18.9	98	63	69
	3966	Farm Westerns.	1937-38	12-3-38	ຂ		:	:	:	:	무	12	009'6	6.83	23.11	8 .1	<u></u>	1,230	30.7	80.0	2,476	10	::	22.1	જ	8	S
•																								1			

• Dlameter of ring frame front roller: \$\frac{x}{2}\). Planeter of rings: 1\frac{x}{2}\)
† It is to be noted that the total loss is for a small rample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

### 2.—BAILHONGAL COTTON.

These samples have been tested by arrangement with the Bombay Millowners' ciation, Bombay, who have very kindly agreed to arrange for the supply each season mples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)
1042	Bailhongal	1930-31	12
1315	9,	1931-32	12
1775	99	1932-33	11
2371	57	1933-34	11
2743	Bailhongal Compta	1934–35	11
3147	Bailhongal	1935-36	11
3550	••	1936-37	11
4010	Bailhongal Compta	1937–38	121

I.—Spinning Tests.

### reatment :--

- (a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1, possesses a band drive arrangement.

Spinning Master's Report:—

(a) Cotton:—

						R ZITHONOTE				
		}	1930-31.	1931-32,	1932-33.	1003-38.	1934-35	1935~96.	1936-37.	1937-38.
•••		•	Creamy-white.	Dull white	Dullish creamy- white.	Creamy-n lilte.	White to creamy-white.	White to creamy-white.		White to creamy-white.
CŽS	•	• .	Fairly leafy	Leafy; almost free of stains.	Leafy—very fine leaf.	Very leafy	Leafy (very fine leaf).	Leafy	Leafy	Lenty.
•			Good	Soft	Good	Good	Good	Good	Tair	Fait.
ape	d n	ep-	Well-gianed	Well-ginned	Well-ginned	Slightly knotted	Well-ginned	Well-ginned	Well-ginned	
•	•	••	1% ginned and partly ginned.				Contains too many un- ginned seeds.			Contains some ginned and cut seeds.
űver.	•	••	Clean	A little pin trash present.	A triffe leafy	Fairly leafy	Clean	Clean	Good	Clean.
eb.	•	•	Very good	Even and nep- free.	Even and nep- free.	Good	Even and nep- free.	Good	Good	Good, nep-free.
of s.	ten	Agt	11.2 grams	15.6 grams durty.	15,2 grams	19.5 grams	15.6 grams	12.8 grams	13,2 grams	12.8 grams.
£8	••		Fully pressed	Fine strong staple.	Contains much very short fibre.			••	••	••
	/ሕነ	٦	7arn			<del>'</del>	<u>`</u>	<u> </u>	<u> </u>	

(b) Yarn :---

						Bailhong.	AL.			
			1930–31.	1031-32.	1932-33.	1933-34.	1934-33.	1935-36.	1036–37.	1037-38.
Dess.	••		Clean	A triffe leafy	Clean	Almost clean	Almost elean	Clean	Almost clean	Clean.
<b>ess</b>	••	••	Fairly even	Even	Fairly even	Even in the two lower counts.	Fakily even	Even	Even	Even.
0.625	••	••	A little neppy.	Fairly free of nep.	Free of nep	Free of nep .,	Practically free of nep.	Almost nep-free	Fairly free of nep.	Fairly free of nep.
incas rka		٠.			<b></b> .	Slubby		••	••	** ,
	<u> </u>	••	<u></u>			A 1	••			:

Spinning Test Details and Results.—See Table 2 on page 84.

### II.—GRADER'S REPORT\* FOR BAILHONGAL COTTON.

				•			BAILHONGAL,				
				1930-31.	1931–32.	1932–33.	1933-34,	1934-35,	1935-36.	1936-37.	1937-38.
. Contract valued under	: .	:	:	Broach	Broach/Kumpta	Broach/Kumpta Hedge Contract No. Broach 5 Southern.	:	July/Aug. Broach.	Broach April/May.	July/Aug. Broach. Broach April/May. Broach April/May	Broach April/May.
Class	<b>:</b> 1	:	:	Fully Good	Fully Good	Good M. G.	Fully Good	Fully good to fine	Fully good to fine. Fully good to fine	Fully good to fine	Barely fine.
Colour	··:	;	:	Reddish	Reddish Line	Brownish	Brownsh	Brownish white	Brownish white	Brownish white	Brownish white.
Staple Length	:	:	:	"8/	31/32"	1/8"	13/16"	3/4"	13/16″		7/8*.
Staple Strength	:	:	:	Fair	Good	Moderate	Fair	Fair	Cood	Good	. Good.
Regularity	:	:	:	Fair	Fair	Regular	Fair	Somewhat irregular Fair	:	Good	Good.
Value above or below contract rate	ontrac	rate	:	Rs. 35 on	Rs. 30 on	Rs. 25 on	Rs. 15 on	Rs. 30 on	Rs. 30 on	Rs. 30 on	Rs. 35 on.
Basis	:	:	:	Rs. 190	Rs. 170	F. G. Broach Ap	. G. Broach April/Broach July/Aug Rs. 232 May 1933, Rs. 203,	:	Rs. 203	Rs. 247	Rs. 164,
Date of Valuation	:	:	:	11-5-31	5-5-32	15-5-33	9-7-34	3-7-35	20-1-36	23-3-37	(26-3-38,
Remarks	:	:	:	:	:	Inferior in staple to last year's crop.	3 to				

\* Reports for 1832-33, 1833-34 and 1935-36 onwards were made by the mill supplying the sample.

Table 2.—SPINNING TEST RESULTS FOR BAILHONGAL COTTON.

12	ĒĒ		Teeling Room.	2	2	8	8	8	2	2	\$	12	78	8	73	22	81	2	21	8	8	: 28	02	2	<b>8</b>
36	RELATIVE HUMIDITY (%)		spinning Room.	P	8		8	8	8	8	9	E		 #	e	 8	 8	5	8	5		- 29	8	8	
25	Texper Atore (°F).	<u> </u>	spinning Room.			 16	8	8	 88	88	87	2		98	8			g		120		- 52	82	- 68	
	TA	<u>1                                    </u>	Actual,	.3	-0.	1.0	17.6	19.0	67	17.2	18.0	17.6	•	63	17.4	19.0	93.0	17.1	18.7	17.1	18.8	7	17.2	18.0	#.#
75		_	Turns per Inch.	17	19,	ěl	1.	<u>~</u>	61	F	<b>~</b>	=	30.	22	15	<u>۳</u>	 El	12		=	18	- S	=		
8			Neps per yard.	2,2	1.5	2.0	1.8	ei ei	61	8.0	1.0	8.0	1.0	9.0	8.0	1.0	0.8	1.0	.: ::	1.2	1.0	1.0	8,0	1.0	1.2
23		_	L'vennes Class.	6	*	מו	69	*	40	-	7	5	4	۵	4	*	10	ေ	*	5	*	145	6	•	*
ឆ	LTS.		Count-Work Product.	2905	1200	1965	2151	2100	2320	2517	2167	916	2337	2348	2730	2740	2804	9328	2862	2476	2480	2550	2485	2514	2448
ន្ត	Test Resours	BALLISTIO.	Work of Rup- ture (meh-lb.)	114.4	95.6	70.8	104.4	87.8	80.0	107.6	93.6	110.8	98.0	78.8	135.8	117.0	98.4	110.4	90.0	123.8	107.6	85.6	122.4	105.2	80.8
82	YARN T	_	Counts Actual.	10.8	33.3	29.7	9.0	24.7	20.0	20.0	33.4	0.03	8.7	20.8	20.1	8.3	28.6	19.5	93.8	20.0	33.1	20.0	8.3	23.0	30.3
82			Count-Strength Product.	1483	1427	1293	1301	1127	1280	1325	1210	1991	1481	1322	1876	1810	1707	1343	1100	1691	1054	1410	1583	0F91	1301
4		LEA.	Strength (lbs )	74.0	61.0	14.0	4.70	45.8	44.3	61.3	51.9	73.2	04.1	43.3	93.8	7.07	61.8	66.5	8.02	83.7	71.0	40.3	78.1	65.1	42.8
s			Counts Actual	10.8	33.1	20.3	20.2	94.0	28.0	20.0	83 8.8	0.0	1.83	30.0	0.0	23.0	28.6	80.2	23.6	8	8.3	20.1	20.3	23.8	30.4
16			Turns per inch.	17.08	19.73	23,11	17.08	10.73	23.11	17.08	10.73	17.09	10.73	33,11	17.08	10,73	23.11	17.98	19,73	17.09	10.73	21.86	17.98	10.73	21.80
77	PARTICULARS		Draft.	0.25	5.05	7.58	5.43	6.54	0.76	5.21	6.03	6.10	6.47	6.76	5.81	5.43	0.70	5.05	0 41	6.13	6.21	6.28	5.03	5.41	6.70
22	FRAME PAR		Spindle Speed, R.P.M.	9,450	9,500	006'0	9,050	9,450	000'6	9,050	0° to0	008'0	000'6	000'0	9,500	8,750	9,830	9,450	0,500	9,400	0,330	9,500	11,300	000'0	10,000
22		,bee	Front Roller Spo R. P. M.	188	177	157	187	173	161	100	17.1	002	170	154	707	165	152	102	173	g	171	159	715	180	168
Ħ		per Der	Yarn Breskages 100 spindles hour.	•	7	ន្ទ	82	100	20	110	ā	8	30	102	ន	26	22	47	7	2	ន	စ္တ	10	8	8
2	IGES.		f.szo.I LitoT	10.7	:	:	21.8	:	<u>:</u>	12		8,8	:	<del>-</del>	8.	:		17.0	-÷	27.2	:	<u>: </u>	29.7	:	╧╢
•	Waste Percentages.	-	Spinning Loss.	6.9	:	: {	0.7	:	<u>:</u>		ļ	<del>*</del>	:	ļ	 	;	:	*. 	ᆛ		:	ᆛ	; 	:	-
~	ara P	٠,	Card Room Loss	47.	:	:		:	<u>:</u>	10.2	÷		:	- }	 8	:	<u>. ļ</u>	7	Ļ	8.	:	_ļ		:	<u>:</u>
~	ř	.8	Blow Room Loss	12.2	:	<u>: [</u>	13.3	:	:	15,6	<u>!</u>	13.8	:	:	13.8	:	:	6.01 -	<u>: </u>	55 55 56 57 57 58 58 58 58 58 58 58 58 58 58 58 58 58	:	<u>: </u>	12,1	:	<u>: </u>
•	lbs.)	() e	Weight of Sampl	ន 			<b>2</b>			2		2			2			2		<u> </u>		_	유 		_
۵		_	faulmon stanoo	202	7	E S	8	ձ	30B	ន	ត	ន	ä	80B	ន	ã	30B	티	ā	8	ei ei	죓	ຂ	ន	g g
~			Date of Spinning.	4-5-31	4-5-31	8-5-31	20-4-32	28-4-32	30-4-33	18-5-33	19-6-33	9-7-34	10-7-34	10-7-34	10-6-35 56-35	1-6-35	23-0-35	96-1-41	96-1-98 198	6-4-37		6-4-37	13-4-38	14-4-38	14-4-38
~			Beason.	1930-31	1930-31	1030-31	1031-32	1031-32	1031-32	1032-33	1932-33	1933-34	1033-31	1033-34	1034-35	1034-35	1934-35	1935-30	1935-36	1930-37	1936-37	1930-37	1037-38	1987-38	1037-38
e)			Cotton.	Bailhongal.	Bailhongal.	Balihougal.	Bailhongal,	Ballbongal.	Ballbongal.	Ballhongal.	Ballhongal.	Ballbongal, }	Ballhongal,	Bailhongal,	Ballhongal.	Ballhongal.	Ballhongal.	Ballhongal.	Dailhongal,	Ballhongal.	Bailhongal.	Baffhongal.	Bailhongal.	Ballhongal.	Ballbongal,
			Sample No.	1042   B	1042 B	1043	1915 D	1316 D	1316 D	177E B	1775 B	_		-			-+		+	_	_	-+			4010 PB

• Diameter of tings—19". † It is to be noted that the total loss is for a small sample weighing 10 lies.; for bulk sample spun under mill conditions it would be less than shown hate.

### 3.—BROACH COTTON.

hese samples have been tested by arrangement with the Bombay Millowners' Assoa, Bombay, who have very kindly agreed to arrange for the supply each season of es of the first arrivals\* of the new crop.

Sample No.	C	Cotton.	Season.
1007	Broach	(Salar)	1930-31
1314	**	(Salar)	1931-32
1707	**	(Sadhli)	1932-33
2372	,,	(Sadhli)	1933-34
<b>2744</b>	**	(Broach)	193435
3148	"	(Jambusar)	1935-36
3508	,,	(Palej)	1936-37
3965	"	(Palej)	1937–38

the mill supplying the sample explains that Sadhli is a station in the Broach District and Salar is merely the type name given by a seller to Sadhli or similar cotton.

5-36 sample does not represent the early arrivals of Broach but represents the average quality of the Broach cotton.

### I.—SPINNING TESTS.

### reatment :---

) Blow-room.—Up to 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

Card-room.—Up to 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

inning Master's Report.

) Cotton :---

1

				Br	oach.			
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-86.	1936-37.	1937-38.
	White to	Creamy-white.	White ; bright	creamy-white;	creamy-white;	White; bright.	White.	White; bright.
	white. Very bright, clean.	Clean, almost free of leaf.	Almost clean	bright. Fairly clean	bright. Fairly clean.	Fairly clean.	Fairly clean ; a trific stain- ed.	Fairly clean ; an occasional stain.
	Good silky	Fairly good	Good-bodled	Good	Good smooth.	Smooth-bodied	Good soft	Fair.
l Neppiness	Well-ginned	Well-gluned	Well-ginned	Well-ginned	Well-ginned	Well-ginned	Well-ginned	Well-ginned.
			<b></b>			••		
	Olean	Clean	Clean	Clean	Clean	Clean	Clean	Clean
	First class	Even and nep- free.	Even and nep- free.	Good	Good	Even and nep- free.	Free of neps	Almost free of neps.
O fintstrips.	12.6 grams	16.2 grams	15,2 grams	17.5 grams	21 6 grams	17.5 grams	15,8 grams	15.4 grams.
	Fully pressed.	Medium fine staple, regu- lar and fairly strong.				••	••	
Yorn	· · · · · · · · · · · · · · · · · · ·	<u> </u>	· · · · · · · · · · · · · · · · · · ·	·		,	·····	

### Yarn:-

					Bro	oach.			
-		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
••		Clean	Clean	Clean	Clean	Clean	A little leafy .	A little leafy	Clean.
••	.,	Fairly even	Fairly even	Fairly even	Fairly even	Somewhat un-	Fairly even	Fairly oven	Even.
••	••	Free of nep	Almost free of	Free of nep	Free of nep	A triffe neppy.	Fred of nep	Almost free of nep.	Free of neps.
••	••	••	incin.	Shows an occa- sional slub.	••	Slightly slubby.	••		A little slubby.
••	••	•• `	••	••	'	••	;		

inning Test Details and Results.—See Table 3 on page 87.-

II.—GRADER'S REPORT\* FOR BROACH COTTON.

			, I	Вволси	CB.		•	
-	1930–31.	1931–32.	1932-33.	1033-34.	1934-35.	1935-36.	1936-37.	1937~38.
Contract valued under	Broach,	Broach,	Hedge contract Broach. Broach F.G. No. 2. April/May 1933.	Broach.	July/Aug. Broach.	Broach April/May.	Broach April/May.	F. G. M. G. Broach No. II.
Class,	Superfine.	Superfine.	Superfine.	Strict fine.	Fully good to fine.	Superfine.	Fine to superfine.	Extra superfine.
Colour	Vonito.	White with touch of White, cream.	White.	Slightly creamy.	Dull white; slightly White, stained.	White.	White.	White.
Staple Length	13/16'7/8'.	20/32".	3/4".	3/4".	11/16".	11/10".	5/8″.	21/32".
Staple Strength	Fair.	Fair.	Moderate,	Fair.	Poor.	Fair.	Poor.	Moderate.
Regularity	Fair.	Fair.	Somewhat irregular.	Fair.	Fair.	Fair.	Fair.	Regular.
Value above or below contract rate Rs. 10 on.	Rs. 10 on.	Rs. 20 on.	Es. 7 on.	Rs. 10 on Brouch.	Rs. 6 on.	Rs. 6 on.	Ro. 1 on.	Rs. 6 on.
Banis	Rs. 203.	Вв. 170.	F. G. Broach April/	F. G. Broach April/ Rs. 203 July/August Rs. 232. May.	Вв. 232.	Rs. 203.	Rs. 221.	. Кв. 180.
Date of Valuation	14-3-31.	6-5-32.	17-3-33.	9-7-34.	3-7-36.	20-1-30.	19-2-37.	23-2-38.
Remarks	:	;	This sample is doffer- ont in staple and strength as com- pared with last year's crop.	:	:	:	:	:

\* Reports since 1932-33, except for 1934-35, were made by the mill supplying the sample.

Table 3.—SPINNING TEST RESULTS FOR BROACH COTTON.

92	rive Dirr A).		Testing Room.	69	63	23	99	89	5	ı,	20	25	85	78	5.	61 65		6	<u>6</u> -	3	88	જી	29	67	8	88	9	
8	Kelative Hombity (%).		mooA galaalq2	6	g	8	g	02	2	r.	20	7.1	78	20	ಶ	67	g	8	67	69	5	6	89	62	g	6	8	
• 15	ATURE (°F).	•	moon gainalq2		88	88	8	16	18	:8	86	87	33	SG	8	16	8	88	89	ss S	83	83	ż	ŧ	88	22	જ	
8			Turns per Inch. Actual.	15.5	19.0	13.1	15.3	16.4	13.4	15.5	16.4	14.0	15.6	16.3	11.7	15.1	16.4	13.1	11.3	15.4	13.5	14.7	15.2	10.3	13.5	11.6	15.5	
52			Neps per yard.	1.2	1.7	1.5	1.3	1.5	0.5	0.3	0.3	0.5	9.0	8.0	1.8	0:	1.5	0.5	0.5	8.0	8.0	8.0	1.0	 	9.0	8.0	1.0	
15			Livennesa Class.	e		4	13	1	*	13	,,	**	**	+	-	13	13	-	•	-	6.	4	-4	-	6	67		
ន	eurs.		Count-Work Product.	2012	2140	5758	2116	2362	2390	ខ្ល	2383	2332	2253	2307	5003	: ::	1025	2136	2201	2022	2853	2000	2003	2407	1516	2151	2907	
2	Test Resours.	DALLISTIC.	Work of	121.3	101.4	207.2	130 6	151.4	103.2	110.1	143.0	170.0	137.1	139.8	187.6	8.101	105.2	238.8	181.6	175.2	241.8	107.8	130.4	153.2	202.0	150.4	133	
18	Yary		Justof. etguod	16.6	20.5	61	16.2	15.3	12. 1	10.0	10.1	14.2	10.4	16.5	13.0	15.7	15.7	10.2	14.1	14.3	11.8	13.0	10.1	16.3	12.0	17.3	11.8	
17			Count-Strength Product,	070	1168	1141	932	1117	000	810	1001	1907	1090	1273	1001	1120	1303	006	785	1035	1293	1210	1016	1270	1017	833 833	1033	
10		LEA.	(.edl) dignorie	29.0	53.1	05.3	57.0	60.8	SO 3	52.1	65.0	85.6	67.3	78.6	76.8	70.0	83.0	85.7	1.55	73.0	100.9	89.5	61.2	73.0	86.0	56.7	60.3	
15	!		Counts Actual.	16.6	20.1	12.0	10.1	16 0	12.4	16 3	10.1	111	16.2	16.2	1 2	16.0	15.7	10.5	11.2	11.0	13.1	13.9	16.3	10.1	11.7	11.6	11.8	
=			Turns per inch.	15.07	20.23	13.02	15.97	16.97	13.92	15.97	10 01	11.03	15.97	16.97	14.98	15.97	10.07	12.63	11.98	15.07	13.02	14.03	15.97	16.97	13.02	14.99	15.97	
13	Particulars.		Draft.	15. 25	6.25	4.30	200	5.00	5.25		5.53	5 57	6.37	5.37	6,55	6.13	5.58	5.30	5,43	5.13	13	13.	17.5	5.01	5.37	20	. 37	-tage
ä	12		Spindle Speed R. P. M.	8000	10000	8000	8100	0000	1600	2700	8700	8200	8200	8950	2000	7000	8200	0020	7150	8800	7200	2700	27.00	2000	2000	7630	8200	o notone
11	RING FRA	'paa	Front Roller Sp R. P. M.	184	180	203	181	190	301	175	130	200	183	108	188	17.1	180	183	180	200	906	186	174	170	200	101	193	1
10	7	per per	Yarn Dreakages 100 spindles how.	!~	20	1-	88	ឡ	98	121	133	51	\$	36	ន	13	ដូ	G	87	18	2-	12	18	<u>2</u>	61	80	#	Diamotor of ring frame front soller
C			Total Loss.†	15.5	:	14.2	:	:	1 41	;	:	16.2	:	:	17.5	:	:	16.3	:	:	14.0	:	:	:	15.5	:	:	no femme
8	WASTE PERCENTAGES.		.eso.I galanigg	0.0	:	0.5	:	٠	5.0	:	:	1.0	:	:	1.0	:	:	9.0	:	:	0.3	:	:	:	<b>†.</b> 0	:	:	notor of vi
1-	LSTE PE	-,	Card Boom Loss	12 90		8.0	:	•	9.0	:	:	9.7	:	:	10.8	:	:	9.8	:	:	9.0	:	:	:	9.0	:	:	• • 10
9	=	-	Blow Room Los	0.1	:	5.3	:	:	8 1	:	•	6 0	;	:	61	:	;	0.0	:	:	5.9	:	:	:	6.7	:	:	
13	(-6	(l) o	qmas to tilgleW	2		2			2			2			2			2			2				10			
<del>-,</del>		•	Counts Nominal	161	96	ᄗ	16.1	163	읩	10.1	10B	1	10.1	16B	144	10.1	103	ន	14A	1413	ដ	144	10A	16B	의	144	1133	
က			Date of Spinning.	17-3-31	17-3-31	SP + SS	28-4-32	20-1-32	22-3-33	22-3-33	22-3-33	7-7-34	9-7-34	9-7-34	12-0-35	13-6-35	13-6-35	24-4-30	23-4-30	24-4-36	2-3-37	26-2-37	20-2-37	27-2-37	10-3-38	11-3-38	10-3-38	
eı			Season.	1930-31	1930-31	1931-32	1931-32	1031-32	1032-33	1932-33	1932-33	1933-34	1933-34	1933-34	1034-35	1934-35	1934-35	1035-36	1035-36	1935-36	1036-37	1936-37	1936-37	1936-37	1037-38	1937-38	1937-38	
H			No.	1007	1001	1314	1314	1314	1707	1707	1707	2372	2372	55	2744	2744	2744	3148	3148	3148	3508	3508	3508	3208	3965	3965	3065	

• Diameter of ring frame front roller—F. Diameter of rings—13...
† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

### 4.—KARUNGANNI COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1063	Karunganni	1930-31
2413	Karunganni	1933-34
2746	Karunganni (Cambodia Dt.)	1934-35
3271	Karunganni	1935-36
4022	Karunganni	1937-38

### I.—Spinning Tests.

### 1. Treatment :-

(a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

### (a) Cotton :--

						Karunganni.		
				1930-31,	1933-34.	1934-35.	1935-36.	1937-38.
Colour	••	••	••	Creamy-white ; fairly bright,	White to creamy- white; bright.	Whito; bright.	White to creamy- white; bright-	White to creamy white.
Cleanliness	••			Fairly clean.	Fairly clean.	Fairly clean,	ish. A little leafy.	A little leafy.
Feel			٠	Full-bodied.	Good smooth.	Good silky.	Good smooth.	Good.
Ginning and nep	piness	••		A fair amount of knot and nep.	Well-ginned.	Woll-ginned.	A little knotted.	
Sceds	••	٠.	••	Some cut seed.		Few crushed	1	Contains a few
Card sliver				Almost clean.	Fairly elean.	seeds. Clean ; soft.	Almost clean.	cut seeds. Good.
Card web				Somewhat neppy	,.	A little neppy.	A trifle neppy.	Good.
Weight of 10 fla	t strips			and cloudy. 16-4 grams.	23 · 0 grams.	26.0 grams.	18.0 grams.	23.2 grams.
Remarks	••	٠,		Fully-pressed.				

### (b) Yarn :--

-					_	Karunganni.		
				1930-31.	1933-34,	1934-35,	1935-36.	1937-38.
Cleanliness	٠,			Fairly clean.	Almost clean,	Clean.	Little leafy.	A little leafy.
Evenness	••	.,	٠,	Fairly oven.	Fairly oven.	Even.	Fairly oven.	Fairly eyen.
Neppiness	••		••	Somewhat neppy.	A little neppy.	Neppy.	Somewhat neppy.	1
Slubbiness	••	••	٠.٠		A little slubby.		Occasionally	
Remarks	••						slabby.	

<sup>3.</sup> Spinning Test Details and Results: -See Table 4 on page 90.

II.—GRADER'S REPORT\* FOR KARUNGANNI CO'LTON.

	1930-31.	. 1933-34.	1934-35.	1935-36.	1937-38.
Contract valued under	Broach.	Broach.	July/August Broach.	Broach July/August.	Broach April/May.
Cluss	Fine.	Fine.	Superfino.	Fine.	Fine.
Colour	White.	White.	Bright white.	White	Greamy-white.
Staple Length	, 1 inch.	15/16 inch.	7/8 inch.	13, 16 inch.	29,32 inch.
Staple Strongth	Irregular.	Good.	Fair.	Fair.	Pair.
Regularity	Very irregular.	Good.	Slightly irregular.	Slightly irregular.	Irrogular.
Value above or below contract rate	Rs. 50 on.	Rs. 55 on Broach.	Rs. 55 on.	Rs. 30 on.	Rs. 40 on.
	Rs. 175.	Bs. 203 July/Aug. Broach.	Rs. 232.	R«. 220.	Вя. 157.
Date of Valuation	30-5-31.	9-7-34.	3-7-35.	1-7-36.	7-4-38
Remarks	Valued on name only.	•	Somowhat soft,	•	·   

\* Grader's Report for 1933-34 and 1935-36 onwards is compiled by the mill supplying the sample.

Table 4.- SPINNING TEST RESULTS FOR KARUNGANNI COTTON.

:

55	RELATIVE HUMIDITY (%).	•	mood zulter	8	ı	88	88	83	es l	ei L	7.	ឧ	89	8	99
ន្ត	TART	- 0	Sphining Room	99	8	18	63	8	29	Ş	5	ជ	89	6	જુ
26	Tenper- Aturb (*F.)	"0	nooñ galaalge	96	8	83	88	83	90	87	82	88	68	10	10
3.6		.teual.	Turns per lach. A	17.2	10.0	16.7	18.6	17.5	10.1	17.4	19.1	1.16	15.3	17.3	18.7
23			Zibs der duch	61	3.5	ei ei	2	6:	5.5	6.0	3,8	g.:	2.8	e) ei	61
Ş]		*1	Livenness class	-	12	*	-	-	-	-	4	13	6	-	-
15	ULIB		Count-Work Product.	2205	22.17	2355	2355	2872	2716	2510	2500	2512	2698	2175	1022
90	Yana Test Urbuls	BALLISTIC	%"orkof Rapture ("edl-dəni	110.8	8.40	110.6	100 2	130.5	119.1	127.1	101.0	87.0	107.0	125.0	131.0
gt	YARN		Counts Actual.	19.0	23.7	20.3	75.	19.9	9.0	19.7	1.13	0.00	1.61	10.8	8.01
18			Count-Streagth Product.	1100	1173	1351	1842	1730	1663	1503	13°8	1217	1430	1308	1686
11		Lua.	Strength (Iba.)	60.1	8.09	67.3	1.전	NG.0	7.1.6	71.1	57.0	12.0	01.1	1.00	7.8.7
16			Counts Actual.	19.8	23.1	1.03	23.7	20.0	22.0	20.3	24.1	20.1	15.7	10.7	10.6
316			Turns pet meh	17.09	10.73	17.09	10.73	17.08	10.73	17.98	10.73	21.80	15.97	17.93	19.20
14	PARTICUTABE.		Draft	6.38	6.38	6.19	1 <del>,</del> 0	0.07	0.07	5.98	5.76	0.07	5.65	5.03	0.03
13	FRAUD PART	T.J.	apindle Speed, B.	0100	9375	9000	8950	9500	0020	0020	9700	0200	0300	0926	10350
1	BING FR	'pə	Front Roller Spe R. P. U.	187	12	180	168	I M	126	103	174	165	218	100	108
Ħ		neg Jugar	ख्यात्रां कार प्रमाण १ १९५ स्थिताबुर ००१	36	#	<u> </u>	12	ş	ន	٥	18	ន	22	10	ء 
2	628.		f.eso.I leioT	10.2	:	18.1	:	20.0	:	17.7	:	:	18.7	:	:
6	WASTE PERCENTAGES.		Spinnlag Loss.	0.0	:	8	:	0.0	:	0.3	:	:	9	:	:
80	STB P1	3	Card Room Los	6.2	:	1	:	13.0	:	9.6	;	:	12.5	:	:
t•		.28	BJOA. HOOM TO	7.5	: —	9.0	:	7.8	;	8.8	:	:	. 8	·	:
¢	(1)	le, (lba	Weight of Samp	g		2		ဋ		2			2	_	
	_	٠,	Counts Nominal	8	<b>3</b>	8	2	្ត	22	ន្ត	ā	95	2	20.5	203
-			Date of Spinning.	28-5-31	28-6-31	1-8-34	1-8-31	17-6-35	17-6-35	13-7-30	16-7-36	16-7-30	25-1-39	25-4-38	£6-4-33
٠,			Acaron.	1030-31	1030-31	1033-34	1033-34	1031-35	1031-37	1035-36	1985-30	1933-34	1037-38	1987-38	1937-38
			Cotton.	Karnadanul . 1930–31	Karunganal .	Karunganni , 1933-34	Karunganni.	Karunganul .	Karunganni .	Karunganul .	Karunganni.	Karunganul .	Karunganul , 1037–39	Karunganul .	Karunganni .
-			Sample No.	1063		6113		2716	2746	3271	3271	1720	1022	1023	4022

\* Diameter of ring trans front roller—if. Diameter of ring trans front roller—if. Diameter of rings—14".

† It is to be noted that the total less is for a small sample weighing 10 lbx.; for built sample span under mill conditions it would be ess than shown here.

### 5.—NANDYAL COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs).
1069	Nandyal	1930-31	11
2751	,,	(Northern Cambodia). 1934-35	10

### 1.—Spinning Tests.

- 1. Treatment.—The 1930-31 sample was passed through the Porcupine, Crighton (twice), Hopper, Scutcher (3 times), Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. The 1934-35 sample was passed through the Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times) in the blow-room and was spun on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement; otherwise its treatment was the same as for the cotton of the other season.
- 2. Spinning Master's Report :-
  - (a) Cotion:—

					Nan	DYAL.
			.— <u>.                                   </u>		1930-31.	1934-35.
Colour	••	••			Croamy-white.	White to creamy-white
Cleanliness		••	••		Loafy (very fine leaf).	Slightly stained; leafy.
Feel			••	٠,	Good ; soft.	Good.
Ginning and I	Vopi	iness	••	••	Well-ginned; a little neppy.	Woll-ginned.
Sceds	••	••	••	••		
Card Sliver	••	••			Clean.	Clean ; soft.
Card Web					Trific neppy.	Slightly noppy.
Weight of ten	flat	strips			15 · 8 grams.	25 · 8 grams.
Remarks	••		••	••	Staple regular in longth and of good strength.	

### (a) Yarn :--

					NAN	DYAL.
			· 		1930-31.	1934-35.
Cleanliness	••	••	••	••	Clean.	Cloan.
Evenness	••	••			Fairly even.	Fairly oven.
Noppiness	••	••	••		A little too neppy.	A little neppy (fine neps).
Slubbiness	.,	••		••	••	A trifle slubby.

<sup>3.</sup> Spinning Test Details and Results:—See Table 5 on page 92.

### II.-GRADER'S REPORT\* FOR NANDYAL COTTON.

							YAL,
		}			<u>'</u>	1930-31,	1034-36.
Contract valued under	::	::	::	::	::	Broach. Baroly fine.	Broach Inly/August. Fino.
Colour Staplo Longth	::	::	::	::	::	White. 15/16 inch.	Cloamy. 7/8 inch.
Staple Strongth Regularity	::	::	::	::	::	Good. Fair.	Good. Fairly rogular.
Value above or below contra Basis	contra	oot rato	::	::	::	Rs. 46 on. Rs. 180.	Rs. 80 on. Broach July/August.
Date of Valuation Remarks	::	::	::	::	::	10.0.31.	26-6-35.
					1		

\*Roport for 1931-35 is supplied by the mill supplying the sample.

Table 5.—SPINNING TEST RESULTS FOR NANDYAL COTTON.

		<b>]</b>		-moon united T	8	89	29	1 2	7.7	22
	10	Relative Humidity. (%).						-		
	98	<u> </u>		mooil zalanigā	5		 	&		
	33	TEMPER ATURE (°F.)	•	moost galaalg&	3	8	<u>2</u>	35	88	
	닭.			Turns per inch Actual.	19.0	21.1	23.	16.0	18.0	10.6
	şi			Zeho her I anl.	13.	6.0	7.	19.55	ei ei	61
	<u>2]</u>			Erenness Class		13	iş,	-	4	ני
	21	TLTS.		Count-Work Product.	2,715	9,600	2,704	2,372	2,394	2,423
5	50	Тгэт Визиктя	BALLISTIC.	Work of Rupture (mch-lbs)	110.8	83.4	80.0	118.6	100.6	101.8
	10	Улян 7		lents Actual	2. .5.	31.0	33.8	20.0	23,8	23.8
	18			Count-Strength Product.	1,383	1,311	1, 105	1,399	1,235	1,302
FOR INFINDIAL	17		LEA.	Strength (lbs )	65.7	19.3	49.7	70.3	52.1	68.6
4	16			Counts Actual	24,1	31.0	32.0	10.0	23.7	23.8
	16			dond tog estipT	19,73	21.80	23,26	17.08	19.73	20.71
RESOLIS	‡	ICUL UR9.*		.ນធα	7.11	7.29	7.81	5.08	6.13	0.25
TEST E	2	PRANE PARTICULARS.	<b>'</b> r	Spindle spec	0,850	9,300	000'6	8,800	8,650	10,500
-	램		ʻpa:	Front Rollerspo	180	156	112	180	150	186
Table 5 Skinning	#		80) 80)	Yana Breskap Per 100 aplad Per hour.	18	22	9	L)	£	20
	10	GKY.		Total Loss.†	9.1	:	:	21.0	:	:
( ( (	۵	ncenta		bylaning Loss.	0.6	:	:	9.55	:	<u>:</u>
an	36)	Waste Percentages	*88	Canl Room Lo.	e: 0	:	:	13.0	:	_:
~	2	X	.Ze(	Blow Room Lo	10.5	:	:	6.8	:	<u>:</u>
	9	([pgr) <sup>*</sup>	ojd	meS to tdgls777	02			Q.		}
			'n	Counts Nomin	16	စ္က	<b>.</b>	ខ្ព	21 A	213
	,		=	Dato of Splinding,	16-0-1	16-0-1	4-0-31	21-0-35	22-0-35	22-0-35
	£			garon,	1030-31	1030-31	1030-31	1034-35	1031-33	1031-33
•	21			Cotton.	Nandyal	Nandyal	Nandyal	Nandyal	Nandyai	Nandyal
	-			Famplo No.	1060	1000	1000	. 1572 ·	1512	1612

\*Diameter of ring frame front roller—?. Diameter of rings—11.

### 6.-NORTHERN CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Colton.		Season.
1064	Northern Cambodia (Kurnool)	 	1930-31
2747	Northern Cambodia (Kurnool)	 	1934-35
3272	Northern Cambodia	 ٠.	1935-36
3685	Northern Cambodia	 	1936-37

### I .- SPINNING TESTS.

### 1. Treatment:

- (a) Blow-room.—1930-31:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—1930-31:—Card, Drawing (2 heads), Slubber Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:-

				Northern (	Cambodia.	
<del></del>			1930-31.	1934-35.	1035-36.	1936-37.
Colour			Creamy-white to creamy.	Creamy-white.	White to creamy-white.	Creamy-white to creamy.
Cloanliness	••	••	Shows an occasional stain; fairly clean.	Occasionally stained.	Fairly cloan.	Loafy.
Fool		• •	Full bodied.	Somowhat softish.	Smooth and softish.	Soft.
Ginning and n	ppines	٠	Somowhat knotted and nop- ped.	Fairly well-ginned.	Fairly well-ginned.	
Seeds	••	••	1% ginned and unginned seeds.			A few ginned.
Card Sliver			Clean.	Clean.	Cloan and soft.	A little leafy.
Card Web			Fairly good.	Gaad.	A little neppy.	Very neppy.
Weight of 10	flat stri	рч	15 · 7 grams.	20 · 4 grams.	21 · 6 grams.	31.8 grams.
Remarks			··	••	••	••
·····	(b	) ]	?arn :			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
				Normens (	Cambodia.	
			1930-31.	1931-35.	1935-36.	1936-37.
Cleanliness			Fairly clean.	Almost clean.	Almost clean.	Fairly clean.
Evenness			Fairly even.	Fairly even.	Fairly even.	A little uneven.
Noppiness			Somewhat noppy.	Fairly noppy.	Neppy.	Very neppy.
			1	Somewhat slubby.	A little slubby.	••

<sup>3.</sup> Spinning Test Details and Results :- See Table 6 on page 95.

II.—GRADER'S REPORT\* FOR NORTHERN CAMBODIA.

			Йоктиеки Самворіа.		
		1930-31.	1034-35.	1935-36,	1936-37.
Contract valued under	:	Broach.	July/August Broach.	Broach July/August.	July/August Broach.
Class	:	Fine.	Fine.	F. G. to sine.	Fully good.
Colour	:	Slight-oream.	Brownish white; somewhat stained,	somewhat Greamy-white.	Brownish white.
Staple Length	:	7/8 inch.	Full 7/8 inch.	31,32 inch.	7/8 inch.
Staple Strength	:	Fair.	Very good.	Fair.	Wenk.
Regularity	:	Poor.	Regular.	Fairly regular.	Irregular.
Value above or below contract rate	:	Rs. 35 on.	Rs. 65 on.	Rs. 35 on.	Rs. 10 cm.
Basis	:	Rs. 176.	Rs. 212.	R4, 220.	Rs. 225.
Date of Valuation	:	30-5-31.	3-7-35.	1.7.30.	28.6.37.
Remarks	:	:	:	:	:

\*Report for 1935-36 and 1936-37 is made up by the mill supplying the sample.

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Table 6.—SPINNING TEST RESULTS FOR NORTHERN CAMBODIA.

[ !		Testing Room.	160	1	81 81	1
Kreative Urmidity (%).		mont sulter	- R	1 2 2 2	1 2 2 2	7 F 23
<u> </u>		moon galaniqs		22 E	t to to	1 2 2 2
TINFER- VIUNE ("F.)	<u>.</u>	moolf Saluniqë	88	15 85 85 85 85	* 3 3	25 25 25 25
	-पञ्च	t tog kgrul' Lettusl.	17.1	17.3 10.1 21.2	17.1 19.0	17.3 10.1 21.0
Ì	— 	Neps per yard.	5 O.	6 4 6	5.5	10.5
		Per unive Class.	- 13	13	13	- 17 0
يو		Count-Work Product.	5075 4	957.2 257.2 257.2	2,552	2,571
YARY TEST RESULTS.	HILLISTIC.	-quil to dioW -dish) out -di	112.1	139.2 115.4 75.6	121.8 107.4 82.6	130.0 102.0 85.2
YARY TE		-lentok elnuoD	20.1	19.5 13.6 20.5	20.2 23.8 30.9	21.5
		Ununt-strangl Janbory	1,23,1	1,650 1,533 1,139	1,631	1,101
	LEI.	(adi) útsanië	6.8 6.8 7.9	2 3 3	3 6 3	2.28
	i !	Janis Actual	្ត ខ្លួំ នួ	2	27.6	10.4 21.2 29.8
		Turns yer inch.	19.73	11.03 E. 60	5. 1. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	17.08 19.73 21.86
ALMO FRAME PARTICULARS.		ગામા	5 6	6.07	6.10 5.76 7.11	6.55 8.53 8.53
tar Pari	,tx	'phodie Spec	9,400	0,530 0,500 0,400	007,6 007,6 007,6	9,100 9,300 8,500
RING FR	,ten		3 5	18.1 16.0	801 2.71 Ar.1	191
	1.44 194	Yarn Hreakages 100 apladics hour.	ា ន	2 % 12	2 6 13	2 23 12
1 2		f.eso.I inloT	55 :	<u> </u>	<u> </u>	ा <u>र</u> इ. : :
Wasts Percentages.		Splnning Loss.	9.4	ē::	ë : :	.e : :
节音	.84	Card Room Los	* :	19.0	::	<u>z</u> : :
AT#	.24	to I mooil wold	e. :	::::	:	रा : :
(,a.	ll) old	Weight of Sam	٤	9	=	5
	 1	Counts Nomina	ត ភ	ស ស ស ស	តិ តិ គ	ត ត ខ
	~	Date of Spinning.	28-5-31 28-5-31	18-6-35 18-6-31 14-6-31	13 -7-36 17-7-36 17-7-38	
-		Seron	10-00-31	1931-35 1931-35 1931-35	1935-10 1935-34 1935-34	19 16-37 1936-37 1916-37
		Cotton.	Northern Cambodia 1930–31 Northern Cambodia 1930–31	Northern Cambodis 1931-35 Northern Cambodis 1931-35 Northern Cambodis 1931-35	Northern Cambodia 1935-36 Northern Cambodia 1935-36 Northern Cambodia 1935-39	Northern Cambodia 1936-37 Northern Cambodia 1936-37 Northern Cambodia 1976-37
		Simple No.	1901		35.55 57.05 67.05 67.05	36% 36% 36% 36%

• Diameter of ring frame front roller—F. Diameter of ring frame front front front front from the form of form of front f

### 7.—BENGALS COTTON.

These samples have been tested by arrangement with the Bombay Millowners' ociation, Bombay, who have very kindly agreed to arrange for the supply each season amples of the first arrivals of the new crop.

ample	Cotton.	Place.	Season.	Sample	Cotton.	Place.	Season.
No.				No.			
1602	Bengals.	Kosi	1932–33	3030	Bengals.	Hansi	 1935–36
2106	**	Kosi	1933-34	3438	,,	Hansi	 1936–37
2667	••	Hansi	1934-35	3898	,,	Hansi	 1937-38

### I.—SPINNING TESTS.

### Treatment :-

- (a) Blow-room.—Upto 1934-35 inclusive:—Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times); 1935-36 onwards; Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34 inclusive:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. From 1934-35 onwards:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a hand drive arrangement.

### Spinning Master's Report :--

### (a) Cotton:

	-			Tieng 41	S.		
	_	1932-33.	1033-34,	1934-35.	1935-36.	1978-37.	1937-35.
٠.		Creams white	Greamy-white to	Creamy-white	White to creamy - white.	White to creamy- white.	White to creamy white.
Iñc 5%		Leafy ; stained	Badiv stained and leafy.	i Badly stained; leafy	Leafy ; a little stained.	Leafy; slightly dusty; a little strined.	A trifle leafy an durty; a lettle stained
••	••	Roughish	Fairly good	. Softish	Rough	Rough	Rough
agand nej	nni-	Somewhat knotted	· ·	Fairly well-glaned	Well-ginned	Well-gioned	Good
••	••	2.2% unginned	Contains a few sceds.				4 few.
Sliver		Almost clern	Clean	l'airly clean	Almost clean	A little kafy	Almost cleau
r.cp	••	Good	Good	. Pairly good after eas- ing the tension.	Good	Good, almost free from neps.	Good ; absolutely free of neps
ht of 10 ps.	flat	22.5 grams	19.9 grams ,	. 26 3 grams	21.0 grams	18.4 grams	18.3 gram
uka	••	Well-watered; bre ago execusivo in G		A poor sample			

### (b) Yarn:

•				Benou	s.		
		1032-53.	1932-34,	1934-35	1935-36	1976-27.	1937-33.
nnes			Little leafy		•	Clean and free of leaf	Cleva. Calris even.
pine-s	••		tower count only.		Nep-free		Pree of nep.
րր <sub>ք</sub> ու⊷	••			slubby	Somewhat shibby	Rather slubby.	A little slubby.

Spinning Test Details and Results: -See Table 7 on page 98.

### II.--GRADER'S REPORT\* FOR BENGALS COTTON.

				:		BENGALS.	r.s.		
			·	1932-33.	1939-34.	1034-35.	1935-36.	1936-37.	1937-38.
Contract valued under	:	:	:	Bengals.	Bengals.	Bengaly,	Bengals.	Bengal.	Bengal.
Class	:	:	:	Fully good.	Fully good.	Fully good.	Fully good M. G.	Fully good M.G.	Fully good M. G.
Colour	:	:	:	White.	Dull,	White.	Fairly white.	Pairly white.	White.
Staple Length	:	;	:	11/16 inch.	3/8 inch.	3/8 inch.	1/2 inch.	9/16 inch.	1/2 inch.
Staple Strength	:	:	:	Fair.	* Rather poor.	Fair.	Good.	Good.	Good.
Regularity	·:	:	:	Fair.	Good.	Fair.	Good.	Fair.	Good.
Value above or below contract rate	ntract	rate	:	Rs. 10 on.	Rs. 7 off.	Its. 2 on.	Rs. 10 on.	Rs. 7 on.	Rs. 6 on.
Basis	:	:	:	Rs. 168.	Rs. 145.	Rs. 151.	Rs. 148.	Rs. 164.	Rs. 131,
Date of Valuation	:	:	:	:	22-1-34.	8-2-35.	.1-1-36.	17-12-36.	20-12-37.
Remarks	:	: 1	:	:	:	•	:	;.	:

\* Report since 1033-34 is made up by the mill supplying the sample.

						Ë	able	7.	SPI	Table 7.—SPINNING		T RE	SUL	S FC	)R B	TEST RESULTS FOR BENGALS	LS C	COTTON.	ÖN.	=	\$	Ę	ā	r.	5	ŧ
٠	G/	63	•	10	*	~	œ	Ġ	2	=	ᄗ	2	=	2	2		<b>a</b>	2	3	#   		3	- [	Canada A	22	;   
1	· _	_			("	-	ASTE P.	Waste Percentages.	OF.		RIVO FRANC		Pertoceles.					Yun Tr	Trst Aesours	ž.			<del> </del>	ATURE (°F.)	HOMBITY (%).	ا يا:
					dI) e	1.	-			ber ber	'pog'	,b o	-			LEA.			BALLISTIC.					,	•	
Sample No.	Cotton.	Senson.	Date of Spinning.	Counts Nominal.	Weight of Sample	Blow Room Loss	Card Room Loss	Spluning Loss.	f.e20.I laluT	Latn Dtenkagus 100 spindles hour,	Front Roller Spo R. P. M.	o q & ghalqë R.P.M.	Draft	Turns per luch.	Counts Actual.	Strength lbs.	Count-birength Product.	.lantə i. etanoð	Vork of String of (Justinal)	Count-Work. Product.	I's enness Class	Neps per yard.	Turns per inch. Actual.	moon galaniye	moor Sujunida	Testing Room.
		1000 00	2 4 20	- -	<u>۽</u> ا	13.8	15.2	0.0	27.3	ឆ្ន	12	002'7	1.78	9.87	6.4	17.0	ĕ	85	9	1,390	<del></del>	1.0	9.4	<u>۔۔</u> و	£	ŗ.
1602	neugan.		6-1-33			:			:	303	五	000'9	4.78	11.03	0.0	109.0	Ē	6.3	209.0	1,49;	-	=	D. G	£	8	£2
}		1044-61	90-1-34	٤	ä	13.5	11.3	0	:3 :3	•	150	4,900	£.80	1.5.6	6	91.8	\$59	5.0	316.0	110%	_	7.0	5.5	 2	¥	7.
	1		20-1-00			:			:	¢	180	008,3	4.80	11.09	3.9	117.1	870	0.0	365.9	2,191	13	6:	2:0	ş	3	E
2100	: :		29-1-34			::	:	:	:	. 87	185	0,400	ខ្ម	 8	α, ε;	13.	ŝ	9.1	303. 4	1,701	v	0.9	19.3	£	çş	7
1 20	Thomas	1034-25	20-2-25	E	2	1	1 2 2	0.0	27.3	Ē	182	3,300	8.3	.e. 20.±	61.0	15.7	1,92	6.3	203.0	1,295	-	- C:	10.2	6	8	5
9004			90-9-35	8		:			:	136	101	2,000	2.03	11.09	÷.÷	6.0	300	0,3	216.1	1,523	_	:	10.8	90	<u>'</u>	3
2995	: :		20-2-85	8		:	:	:	:	ส์	133	6,330	6.co	19.63	el œ	3.1	ž	ei o	176.0	1,615		6.1	10.1	<b>S</b>	8	::
908	Bengals	1935-36	13-1-36	8	ļ	E	53.0	0.3	26.7	136	17.6	5,300	3,10	10.41	7,0	33.1	ā	9.3	203.0	1,230	17	6,0	10.1	;:	8	8
3030			13-1-36	g		:	:	:	:	199	192	0,000	5.10	11.03	6.5	8.8	12	6.1	269.2	1,612	••	::	10.0	9:	<b>5</b>	Ē
2030			13-1-30	8		:	:	:	:	윩	155	2,300	5.00	13.51 23.51	7,	31.9	륁	ž	100.1	1,717		0.5	12.1	5.	8	2
3438	Bengals	10:30-37	21-12-36	8	9	<u> </u>	5.5	6	130.4	ន	27	Se s	9.3	10.11	6,3	37.5	탏	5.0	971,0	1,161	43	•	9.9	e1 22	៩	8
3438	:		21-12-30	8		:	:	:	:	#	183	5,50	5.10	11.03	9.0	79.3	503	B, E	0.0:5	1,661	12		10.6	2	<b>=</b>	[]
3438	:	1936-37	21-12-30	318		:	:	:	:	#	146	2,000	3.00	13.63 23.63	ei ni	6.08	Ç	7	169.2	3,616	23	0.5	12.0	၉	ខ្លី	P.
3308	Bengals	1937-38	10-1-38	8	2	1	13.8	-	:: ::	S	136	00513	5.29	10.44	9.1	6.10	<b>10</b> 2	9.4	219.4	1,502	-5	<u> </u>	10.0	2	╘	3
3808	:	. 1937-38	10-1-38	ક		:	:	:	:	٥	173	5,500	ફ	11.03	e; 9	91.8	169	£.	333.0	2,033		6.9	10.0	7.	13	F
3398	:	1937-38	11-1-38	833		:	:	:	:	28	3	2,600	8:5	12.63	8.1	35.4	<u> </u>	9.4	905.0	1,697		0.1	5.5	 Z	8	જ :

The to be noted that the total loss is for a simil rample weighing in the or thereadont; for bulk rample spun under mill conditions to would be test than shown here.

### 8.—KHANDESH COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Assoation, Bombay, who have very kindly agreed to arrange for the supply each season of imples of the first arrivals of the new crop.

$mple\ No.$	Cotton.	Place.	Season.	Sample No.	Colton.	Place.	Season.
967	Khandesh	Ranala	1930-31	2105	Khandesh	Saudha	1933-34
1249	37	,,	1931-32	2663	,,	,,	1934-35
968	,,	Nimbora	1930-31	3031	**	"	1935 - 36
1250	**	,,	1931-32	3439	79	,,	1936-37
1603	99	Saudha	1932-33	3957	••		1937-38

### Treatment :---

I.—SPINNING TESTS.

- (a) Blow-room.—Upto 1934-35 inclusive: Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room:—Upto 1933-34 inclusive: Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 onwards:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

Spinning Master's Report:-

(a) Cotton:-

						Khani	реви.				
		Rana	la.	Nin	nbora.			Saudi	13.		
		1930-31.	1931-32.	1930-31.	1931-32.	1932-33.	1933-34,	1934-35.	1935-36.	1930-37.	1937-38.
our	••	White to creamy white; slightly bright.	white.	White to creamy- white.	White to croam y-white.	Brightish oroam y- white.	White to cream you hite; bright.	creamy-	White to cream y- while.	White to creamy- white.	White to cream y-
nliness	••	Occasional stain.	Occasional s taln; leafy.	Leafy	Somewhat stained; leafy.	Some what leafy.	Some what leafy.	Very slightly stalnod; leafy.	Lenly; a trifle stained.	Leafy	Leafy ; a little stained.
٠. ا	••	••	Slightly rough in feel.	Good	Softish	Good	Smooth and bodied.	bood	Roughish	Roughish	Rough.
ning as eppinces.		Fairly well- glaned.	Well-gin- ned.	Fairly knotted.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-glaned.	Not well- ginned.	Well-glaned.
la	••	2.1% ginned and un- ginned.	1.8% un-	1.4% gin- ned.	1.4% ginned and un- ginned.	2.75% ginned and un- ginned.	A few seeds.	1.3% sceds.	••	Quite a few seeds.	••
d Sliver		Clean	Clean		Clean	Clean	Clean	Clean	Clean	A little lenfy.	A little lenfy.
d Web	••	£000	Free of nep	••	Practically nep-free.	Good	Even and nep-free.	Good	Good	Good	Good; fairly free of neps,
ight of atstrips	10.	15.3 grams	18.3 grams		18.5 grams	10.8 grams	lõ.4 grains	19.5 grams	10.6 grams	20.1 gram4	21.6 grams.
narks		Fully pressed		Fully pre-		••					

### (b) Yarn :---

		1				Khani	orsk.				
		Rana	la.	Nhr	ibora.			Satidli	a,		
		1930-31.	1031-32.	1930-31.	1931-32.	1932-33.	1033-34.	1934-35,	1935-36.	1030-37,	1937-38.
nliness		Clean	Almost	Glean	Clean	Clean	Clean	]		1	Clean.
nness .	••	Even in the lower countsonly.	fairly		Fairly even.	Fairly oven.	Even	Fairly even.	Fairly even	Fairly even.	Fairly even
piness	••	Free of nep.	Practically free of nep.	Nep-free	Almost free of nep.	Almost free of nep.	Free of nep	Free of nep.	Nep-free	Free of nep.	Free of nep.
oblucas	••				Occasional slub.			A little slub- by.	A little slub- by.	Occasional slub.	

Spinning Test Details and Results: - See Table 8 on page 101.

II.—GRADER'S REPORT\* FOR KHANDESH COTTON.

	1					Khandushi.					
					Ì						
					-			Sandho.			
•	<u> </u>	Donola		Ninbora.	01'A-						1007
		Partie	_		-'-		16 000	1934.35.	1935-36.	1930-37.	.oc. / cal
			1031.39.	1920-31.	1931-32.	1932-33.	1,121,1-13-15-15-15-15-15-15-15-15-15-15-15-15-15-		- -	- -	
		1930-31.						Oomra.	Oomra.	Oomra.	Comra.
	-		Commi	Oomra.	Oomra.	Oomra.					72.11.v coord
Contract valued under	:	Oomera.				Fully good to	Fme.	Fino.	Fully good	Fully good	M.G.
	:	Fully good.	Fine.	Fully good.		fine.			Toisly white.	Fairly white	Fairly white.
(luse swl.)			7	Wile.	White.	White.	White.	White.	- Cities 4	with cream-	
Colour	:	White.	White.		•		3 /4 inch.	1/2 inch.	11/16 inch.	11/16 inch.	Shy; 11/10 inch.
			19/16 inch	13/16 inch.	27/32 inch.	3/1 men.	411 1/0	•			ī
Staple Longth	:	13/16 inch.	11311 01.61			, ich	Very good.	Good.	Good.	Clood	(1004.
		<b>6</b>	Fair.	Fair.	Fair.	• 194	)			ŗ	Pairly good.
Staple Strength .:	:		,		Good.	Fair.	Good.	Good.	Fairly good.	rair.	
Regulativ	:	- Fisir.	Good			ç	Re. 1 on.	Rs. 2 on.	Rs. 5 on.	Ika. 2 on.	
Office confined the	:	R4, 5 on.	R4, 17 on.	Rs. 5 on.	R4. 18 on.	18: 0 01:	<u> </u>	;		Rs. 202.	•
Value above or include contract.			6	Re. 165.	Rs. 212.	Вч. 188.	Rs. 179.	Rs. 226.	149, 201.		
Basis	:	. Rs. 165.	158. 151: 151: 151: 151: 151: 151: 151: 151:			0.1.33	22-1-34,	8-2-35.	4-1-36.	17-12-36.	24.9.38.
Dato of Valuation		5-2-31.	10.9.32.	6-2-31.	10-2-33:			:	:	:	:
			:	:	:	:	:		_		
Петагки	:	:		_	-\ -\		Total the sample.				

\* Report since 1933.34 is made up by the mill supplying the sample.

	13	Eri .		*woo	Teting R	29	89	20	1.9	:3	99	99	G	33	11	Ľ	S	ぇ	1.	7.	12	? <u>1</u>	5	83	8	S3	당	13	g	5	8	۲,	£3	S	2
	8	HUMINITE (%).	-	тооп	ZajaajdS	57	67	8	8	8	00	73	29	g	89	8	99	6	20	60	89	67	67	90	5	g	8	5	89	8	8	63	69	6	무
	ន	TEMPER- ATORB (°F).	<u> </u>	mool	Rajaaj <b>q</b> S	63	82	8	83	8	88	98	2	83	 	18	31	98	26	2	81	31	81	80	67	67	- 62	5	80	5	5	7.0	87	87	88
	÷ ;		ch.	n1 70	q ansuT .laufof.	19.9	13.1	14.8	13.0	18.7	15.4	13.1	13.1	14.5	13.5	14.6	15,4	13.6	14.9	15.6	13.1	18.5	15.1	12.0	13,9	14.0	19.0	13.5	11.9	13.1	13.1	11.4	11.8	12.3	13.0
	8		<del> </del>	Lorq'	Zody bet	1.3	1.5	1.5	1.8	0.5	1.8	1.9		2.0	0.8			1.2	1.9	1.9	0.5	0.5	0.8	1.0	0.8	0.1	0.8	0.5	0.5	0.0	0.8	0.8	_		1.0
	61		-	.es.clЭ	Evenness		uş	-	<del>د</del>	4	1	-	13		+	_	7		<u>.</u>	•		-	<b>-</b>	+	.,		<u> </u>	<del>-</del>	*	-	<u> </u>	4	-	<del>-</del>	-
	18	LTS.	- 	, , , , , , , , , , , , , , , , , , ,	Count-Wo	2370	3351	507.0	976	2046	2238	2167	2100	1043	3330	2107	2318	9550	15000	2300	2338	2317	2371	2022	9559	0800	2081	2123	2253	1832	2018	2002	2000	2200	20855
ron.	ន	Yary Test Brouts	BALLISTIC.		if 10 2157/ donl) enut	235.2	106.2	146.8	35.6	17.3	150.R	230.0		_ļ	131.0	171.1	168.0	181.8	177.2	_!	101.8	163.2	170.8	2.75.8		_!		178.4	183.2		10+01	103.2			301.1
FOR KHANDESH COTTON.	10	Yary Te	THE STATE OF		Conne de	10.1	13.0	13.8		13.0	11.0	10.3		ᆛ	9 ::	13.3	13.8	1.2.1	11.9	13.8	12.0	16.2	13.0	10.%	- ::	19.3	10.01	11.9	2.3	10.9	10.4	19.3			10.3
ESH	18		-	<u> </u>	Count-Stre	1 300	1 - 1	780	1070	170	1005	1 816		_	078	110	1111	209	8.00	000	1 210		1003	800			753		1.084	501	707	505 1	010		735
AND	17 1		LEA.	_	) dignasik	50.0	78.6	80.9	87.1	71.0	78.0 10	91.2		67.1	ca	0.00	pl.n 11	1 1:	61.0	.e. e	78.5	63.8	75.9 10	70.3	61.7	74.3	7.7.	50.3	63.0	18.0	68.0	63	1-	_	-
KH			H		Counts Ac			-			6	_	65 59	-	5	<b>o</b> n	9	, 		<b>-</b>			_	_		_	_		3	<u> </u>		1 49	<b>,</b> ,,		10.0
	16		<u> </u> !	<u> </u>		2.63 10.4	13.02 11.9	13.	3.02 11.0	5.03 13	13. 97	63 10.		14.1	11 22	13	= 6	3	3	19 17	13.02 12.0	93 13.9	0.11.0			ان د	63	13 02 12.0	13.	63 10.4		65 12.	3 to		1
)LTS	15		_	-dənl	rod eum		_	5 15.03		_		1 12.63		15.03	3 13.92	15 03	15.07	12 32		_!			3 15.07	12.63	13.92		12.03		3 14.03		13.53	0 14.65			14.8
RESULTS	11	FRANG PARTICULARS	_		Draft,	3.63	5.7	0.73	- e	0.50	6.5	5.51	5.7	0.75	6.39	£.0	0.33	2	6.10		3.3	6.13	6,13	<u> </u>	5.3	6.91	5.8	5.33	5.03	<u> </u>	5.5	6.10			6.65
TEST ]	13	TAKE LY	1	podq	Spindis 12.1.11.	: 	:	:	2.5 S	5	(A)	; : 	:	:	650	7.100			6020	1	7500		7730	0050	0.30	062	25	23%	7300	0019	200	7200	7250	7850	8100
	=	lirso E	°po:	or Spo	Front Roll 12.4.31	1 261	188	175	158	173	2	H	15.	172	137	1	7	2	169	7	<u></u>	168	176	109	160	183	<u>'61</u>	170	182	181	196	182	973	513	£13
SPINNING	11		ber	Page Maren	Yarn Bres 100 eph Louir.	30	ä	ន	<u> </u>	2		9	4	2		ક	2	<u>8</u>	131	25	_	100	58		20	7		ន	8				81	81	25
-SPI	91	rers.		1.6	rol latol'	<u> </u>	:	<u>:</u>	ਜ ਜ	:	:	21.8	:	<u>:</u>	10.8	:	:	: ::	:	-	0.02	:	:	20.4	:	:	21.4	:	:	30.3	:	:	3.6	;	-
<b>8</b>	0	WASTR PERCENTIONS.	_	. PAG.1	. polonige	0.0	:	<u>:</u>		:	: 	2.0	:	:	1.0	:	:		:	: -	8.0	: 		10 10			8 0.3	: 	:	\$.0 0	:	:	0 0.4	:	-
Table 8	Ø	[ ELEST]	.,	n Los	Card Rout	9.3	:	إ:_	10.8	:	:	=	:		10.3	:	:	Ξ	:	:	8.18	:	:	10.0	-		12.3	:	-:	12.0	<u>:</u>	:	3 12.6	:	-
H			۶.	90' <u>]</u> ((	ioosi wolii	15.7	:	:	11.3	:	:	13.3	:	:	19.2	:	:	12	:	:	Ĩ	:	:	20.2	<u>:</u>	:	2.5	:	:	E.	:	:	12.33	. :	
	•	("6	A) of	dung	Welght of	2			۶			a E			2			Ē			Ē			=			=			=			8		
	17		٠	բսյա	N. elanoD	10.1	12.4	#	151	14.7	148	10,4	12.1	144	123	14.1	113	턴	117	143	ឡ	11.7	1113	101	E	1213	10.1	121	12R	Ē	103	1513	S	မွ	ă
				Date of Spluning.		2-2-31	2-2-31	3-2-31	6-1-01 01-01	2-2-32	3-2-32	2-2-31	2-2-31	3-2-31	3-2-32	4-2-33	1 2-33	5-1-33	5-1-33	9-1-33	27-1-34	27-1-34	27-1-34	15-2-35	16-2-33	10-2 35	14-1-30	14-1-30	14-1-30	21-12-36	21-12-36	21-12-30	+-3-38	4-3-38	4-3-39
٠.	٠٠,			Season. S		18-0061	1930-31	1930-31	1031-32	1931-32	1931-32	1930-31	1020-31	1930-31	1931-32	1931-32	10 11-39	1912-33	1912-33	18-23-31	10 23-31	1933-31	1013-34	1914-35	19:31-35	1934-35	1935-36	1935-36	1935-30	1936-37	1936-37	1936-37	1937-38	1937-38	1037-38
	n	_	<del>.</del> -			<u> </u>		إب				<u> </u>		_	,			!			<u> </u>					_				ļ			ļ_		
	b			Cotton.		Randesh (Ranala).	(Ranal	(Range	Khandesh (Ranala)	(Rangl	(Rand	Khandesh	Khandeh	Khandeth	Khandesh	Khandeth	Khandeh	Khandesh	Klundeh	Khandesh	Khandesh	Khandeh	Khandeth	Fhandeth	Khandesh	Khandesh	Khandell	Kbandesh	Khandeh	Khandesh	Khandesh	Khandesh	Shandesh	Khandesh	Khandeh
				Sample No.		1		S.	1249	1219	1249	308	956	963	1950	1530	1950	1603	1003	1603	2102	2012	2102	2663	2003 2003	2003	3031	HO:	2031	34.79	3439	3130	3957	1957	1001

\*. • Dirmeter of ring frame front roller; P. Dirmeter of ring frame front range is 1f.
† 16 is to be noted that the total loss is for a small sample weighing 10 lbs.; for bolk sample spun under mill conditions it would be less than shown here.

### 9 (a).—UJJAIN COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Associate, Bombay, who have very kindly agreed to arrange for the supply each season of samples he first arrivals of the new crop.

nple	Cotton.	Place.	Season.	Sample	Cotton.	Place.		Scason.
Vo.	7711 1	****	1000 01	No.	TV14 1			2004 84
969	Ujjain	Ujjain	1930-31	2664	Ujjain	Ujjain .		1934-35
251	"	,,	1931–32	3028	••	>>	• •	1935-36
370	97	,, · ·	1932–33	3453	**	,,		1936-37
107	,,	,,	1933-34	3958	••	,,		1937-38

J.—SPINNING TESTS.

### Treatment :--

- (a) Blow-room—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice). Hopper, Scutcher (3 times). 1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber Inter, Rover and spun from single hank roving on Ring Frame No. 1 1934-35 onwards:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### Spinning Master's Report :—

### (a) Cotton:—

						L'antik (	(UJJAIN).			
-	_		1930-31.	1931-32.	1932-33.	3003-01.	1931-35.	1035-36.	1936-37.	1937-35.
•	•	••	Creamy-white.	Creamy-white; slightly bright.		White to creamy-white; brightish;		White	Walte	White.
wess.	•	••	Fairly leafy	Occasional stain; fairly leafs.		Occasional stain; some- what leafy.	Occasionally statued; leafy.	Leafy; a little stalned.	Leafy	l'airly leafy a little stained
	••	••	Good	Good	Soft and fairly	Good smooth	smooth	Good	Good	l'alr.
ng di f.	d 1	neppl-	A good dral knotted.	l'airly well- ginned.	Somewhat knotted and nepped.	Well-gluned	Well-ginned	Well-glaned		Well-glaned.
	••	•	1.9% unglaned	2%		Contains a few ungin ned seeds.	Contains 1.3% seeds.	Contains 0.78% full clean aceds.		Some,
Sliver	•••			Almost clean	Almost clean	Clean	Clean	Fairly clean	Leafy	A little leady.
Web	••			Nep-free ; s triffe cloudy.	Good	Even and nep- free.	Good	Web good	A little neppy	Good,
nt of ps.	10	O Aa	٠.	19.8 grams	17.7 grame	18.5 grams	20.0 grams	17.1 grams		24.9 grams.
rks	••		Staple irregular		Slightly watered					

### (b) Yarn :-

		1			_	UJJAIN (	(Viate).			
	_		1930-31.	1931-32.	1932-33.	1933-34.	1034-85.	1935-36. :	1036-37.	1937-38.
	••		Fairly even in lower counts.	"	Lycn in two lower counts.	Liven		Clean	Fairly clean Even in the low- er count only.	A little lealy. Liven.
piness biness			Fairly free of hep. A little slubby.	neppy.	Practically free of nep. A trific slubby.	Nep-free	Fairly free of nep.	Nep-Ire <del>e</del>	Takrly free of nep.	A little neppy.
tarks	••	••								• •

Spinning Test Details and Results: - See Table 9 (a) on page 104.

### II.—GRADER'S REPORT\* FOR UJJAIN COTTON.

									<b>Оззаги (Оззаги).</b>	Јззаги).			
	ļ				1930-31.	1931-32.		1932-33.	1933-34.	1931-35.	1935-36.	1936-37.	1937-38.
Contract valued under			:	:	Bronch	Broach	:	Broach	Broach	Bronch	Oomra	Оотга	Comm.
Class	:	:	:	•	Fully good	Fully good to fine Fully good	fine F		Fully good	Fully good	Fully good	Fully good M.G.	Fully good M. G.
Colour	:	:	:	:	White	White	<u> </u>	Whitish	White	. White	Fairly white	Dull	White.
Staple Length	:	•	:	:	f inch	37 inch	:	18 inch	} inch	· j inch ···	33 inch	} inch	} inch.
Staple Strength	:	:	:	:	Fair	Fair	<del>-</del> :	:	Fair	poop	. Good	· Fairly good	Good.
Rogularity	:	:	:	:	Fair	Good	<u> </u>	Irregular	Very fair	. Fair	Good	Fairly good	Good.
Valus above or below contract rato	ract rato	:	:	:	Rs. 10 off	Rs. 20 on	_ <u>#</u> _	Rs. 5 off	Rs. 5 off	Rs. 20 on	Rs. 18 on	Ro. 1 on	Rs. 8 on.
Basis	:	:	:	:	Rs. 200	Rs. 220	<u> </u>	Broach F.G. April Rs. 199 May 1933.		Rs. 262	Rs. 201	Rs. 208	Rs. 162.
Date of Valuation	:	•	:	:	5-2-31	10-2-32	<del>:</del> -	:	22-1-34	8-2-35	4-1-36	30-12-36	24-2-38.
Remarks	:	:	:	:	•	:	<u> </u>	Silky with fine fibros; leafy.	•	:	:	:	:

\* Report since 1932-33 is made up by the mill supplying the sample.

Table 9 (a).—SPINNING TEST	TOTALES.	Waste Percentagns. Hing Prive Pirtoulans. (The Percentagns) (T.) (T.) (T.)	Darnismo.	Blow Room Less  Card Room Loss  Spinning Loss.  Total Loss.†  York John Spindles Spindles Spindles Spindles  Spindle Speed,  Gount-Mork  Turns per inch  Strength (ibs )  Gount-Mork  Count-Actual  Turns per inch  Gount-Actual  Strength (ibs )  Gount-Actual  Spindle Speed,  Actual  Spindle Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles Spindles Spindles  Spindles	11.1 10.1 0.9 20.2 0 194 5.21 12 63 0 0 127.0 127.0 10 0 247.2 247.2 3 2 0 12.2 81 - 65 08	8 130 5.43 13 92 12 1 90 7 10 97 12 0 107.0 2371 4 2 5 13.0 81	7 170 6.29 15 08 13.7 70 5	10.0 11.4 0.6 21.6 44 187 7250 0.22 13.92 13.1 87 1 1054 11.8 190.0 2312 4 2.0 13.3 82 00- 71	42 ' 175 7300 6 38 15 08 15.5 80 1 1081 19 6 173 2 2356 6 1.2 14 5 81 66 70	42 183 7800 6.11 15 97 13.4 01 3 1223 1.3 8 109.4 2838 5 2.9 15 9 81 60 70	11.9 9.6 0 4 20.6 7 190 7350 5 56 13 92 11.9 100.1 1191 12 2 205.2 2503 3 1.8 19 6 83 09 70		19.5	0 107 7450 5.32 13 92 118 133 7 1578 12 0 236.4 2836 3 0.5 13.1 80 67 72	7 200 8000 6 43 11 68 12.1 136.3 1640 19.0 243.2 2018 3 0.5 14.2 70 67 72	51 103 8200 6.34 15.07 11:3 106.2 1520 11:1 188 8 2062 4 0.6 17.1 82 61 68	10.4 11.1 0.2 20.5 0 200 7600 5.32 13.02 12.2 13.01 1100 12.0 237.2 2340 3 2.0 13.5 79 03 68	7 182 7500 5.10 11.08 14.5 99.6 1124 14.1 202.0 2848 4 1.5 11.9 80 68 70	102 8200 5.10 15.07 11.0 111.2 1557 11.1 203.6 2871 4 2.0 15.5 80	20		-9 	20 186 8000 5.30 15.07 11.3 110.2 1570 14.0 202.4 2834 4 0.8 15.0 78 66 61	14.8 14.0 0.6 27.6 22 107 7600 6.13 13.02 12.8 68.2 800 12.7 188.5 2367 3 10 13.6 81 66.  68.	22 186 7000 5 32 14.08 11 4 50.0 815 110 166.4 2179 4 10 11.6 80 08 72	181 8000 6 32 15.07 11.0 70.6 1111 14 5 189,8 2646 6 1.6 15 7	. 212 7050 5.16 11.02 12 1 19.8 971 12 7 189.2 2407 3 2.8 13.3 - ht - 09	56 106 7040 5.12 14.08 13.3 72.0 1030 14.2 170 2 2546 3 2.5 14.1 67 68 66	15 194 8500 5.24 15.07 11.9 87.7 1210 11.1 183.6 2580 3 2.2 15.3 85 67 08	When the first has forth all and the first a
NG TEST	12 13 14	Prave Partioblans	'pəə	Fronk Holler Sp Spindle Speed, 11 P.M	194 5.21 19	180 5.49 13	170 6.29 15	187 7250 6.22	175 7300 6 38 35	183 7800 6.41 15	190 7350 5 55 13	100 8300 6.58 15.	202 7000 6 42 12.	107 7450 5.32 13	200 8000 5 43 11	10) 5900 0.34 15	200 7600 5.32	182 7500 5.10 1	102 8200 5.10	180 7000 5.95	108 7550 5.30 13	180 0850 5.30	186 8000 5.30	107 7500 5.13	186 7600 6 32	181 8000 5 32	212 7050 5.15	195 7000 5.12	194 8500 5.24	a Manustan of wine frame from the william 16
	e 8	WASTE PERCENTAURS.		Card Room Loss.	10.1 0.3	:	:	11.4 0.6	:	:	9.0		10.8 0.2	:	:	:	11.1 0.3	:	:		11.4 0.2	:	:	11.0 0.5	:	:	11.4 0 1	: : : : : : : : : : : : : : : : : : : :	:	
	0 4	7		. Sound Somple of Sound	3-2-31 10 10	12A		3-2-32 12A 10	114	4-2-32 143	23-2-33 12A 10	24-2-33 14B	30-1-31 10 10	20-1-34 12A	20-1-3f 12B	1-2-31 14B	18-2-35 12A 9	18-2-85 11.A	18-2-35 11B	22-2-35 16	12A 10	11-1-30 14.1	11-1-36 14B	5-1-37 12A 8	- 5-1-37 14A	5-1-17 1'cB	7-3-38 12A 10	7-3-38 14A	10-3-38 1173	
	es *1			Scaeon. Scaeon.	040 Tribala 1930-31		: :	Uitain		: :	1670 Ulfafn . 1032-33	:	2107 Ulfala 1933-34	2107 1033-31	2107 ,, 1033-34	2107 1033-31	2064 Ullain 1034-35	2004 ,, : 1934-35	2004 ,, 1034-35	2664 1934-35	Ulfafa	3028 1935-30	3028 1935-36	Uffata		:	Ultum	•	305838	•

\* Diameter of rings; 11". † 12 is to be noted that the total loss is for a small sample weighing 10 lbs, or thereabout; for buik sample synn under mill couditions it would be less than shown ince.

### 9 (b).—UJJAIN COTTON.

ese samples have been tested by arrangement with the Bombay Millowners' Asso-Bombay, who have very kindly agreed to arrange for the supply each season of s of the first arrivals of the new crop.

Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
Ujjain	$\mathbf{Mandsaur}$	1930-31	3064	Ujjain	Mandsaur	1935-36
,,	,,	1932–33	3454	,,	<b>?</b> ?	1936-37
"	22	1933–34	3956	,,	"	1937–38
		1934-35	1			

### I.—SPINNING TESTS.

### eatment :---

- (a) Blow-room:—Upto 1934-35 inclusive:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room:—Upto 1933-34 inclusive:—Card, Drawing (2 heads), Slubber, Inter Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 onwards:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### inning Master's Report:—

### (a) Cotton:—

	- {			ס	jjain (Mandsaur)	·		
		1930-31.	1932~33.	1933-34.	1934-35.	1935–36.	1936-37.	1937-38.
••		Oreamy-white	White; brightish.	White to creamy- white; brightish.	White	White to creamy- white.	Creamy-white to white.	White to creamy white.
		Leafy; stained.	Somewhat leafy.	Fairly clean	Fairly leafy	Somewhat leafy; a little stained.		Fairly leafy.
		Goodish	Roughish	Good	Good	Roughish	Fair	Fair.
nnd	nep-	Fairly well-ginned	Good	Well-ginned	Well-ginned	Well-ginned	Well-ginned	Well-ginned,
		2% unginned	3% unginned		Contains 2.9% seeds and kapas.			Some.
		••	Clean	Clean	Clean	Fairly clean	Contains a little leaf.	Fairly clean.
••			Fairly good; con- siderable fly	Good	Good	Good	A little leafy but free from nep.	Good ; nep-free.
10	flat		shedding. 20.1 grams	15.7 grams	19.6 grams	18.4 grams	19.5 grams	20.3 grams.
••	••	•	Excessivo yarn breakago.	<i>:</i> -				

### (b) Yarn :-- .

	- !			•	v	JAIN (MANDSAUR)	•			
-		1930-31.		1932-33.	1933–34.	1934-35.	1935–36.		1930-37.	1937-38.
		Clean			(	12				Fairly clean.
	•••	Fairly even	••	Fairly even	Even in two lower	Fairly even			• • • • • • • • • • • • • • • • • • • •	Even.
	•			Almost nep-free.	Free of nep	Practically nep	Free of nep		Almost free of nep	Free of nep.
٠	••	.:.					A little slubby .	••	**	
·	••	A little leafy	::				••			· · · · · · · · · · · · · · · · · · ·

Spinning Tests Details and Results:—See Table 9 (b) on page 107.

II.—GRADER'S REPORT\* FOR UJJAIN COTTON.

				Upiain (Mandaud).			
<b>}</b> ·∻	1030-31.	1032-33.	e é	36.	1936-36.	1936-37.	1037-38.
Contract valued unifor	Broach.	Oomra,	Oomra.	Broach.	Oomra,	Oomra.	Oomra.
Class	Fully good.	Fine.	Fino.	Fully good.	Fully good.	Fully good M.G.	Fully good M. G.
Colour	White.	White.	White.	White.	Dull white.	White.	White spotted.
Staplo Length	7/8 inch.	3/4 inch.	21/32 inch.	19/32 inch.	11/16 inch.	5/8 inch.	11/16 inch.
Staple Strongth	Fair.	Fair.	Fair.	Good.	Fair.	Fairly good.	Good.
Regularity	Fair.	Fair.	Fair.	Fair.	Irrogular.	Fairly good.	Vory poor.
Value above or lulaw contractinta.	Re. 10 off.	Rs. 10 on.	Par.	Вя. б оп.	Rs. 5 on.	Вп. 3 об.	Re, 2 on.
Bush	Rs. 200.	Rs. 188.	Кв. 183.	Rs. 252.	Rs. 182.	Rs. 208.	Rs. 162.
Dato of valention	5-2-31.	:	15.2.31,	8-2-36.	30-1-30.	30-12-36,	24-2-38.
Remarks	•		:		:	;	:

\* Report since 1932-33 is made up by the mill supplying the eample,

	ì																									
1 <u>2</u> 2	Relativa Hombiet (%).	'u	ool galisiT	89	04	۶ ۲	티	7.	7.	22	22	ŠĮ.	9	8	25	2	65	69	8	Ç	ž	2	g	67	<b>6</b> ,	
. 26	DH 1821	*1120	ooA zalaniga	80	67	<b>E</b>	8	8	20	69	99	5	g	89	g	72	69	3	89	10	8	19	8	£	Ę	ľ
ន	TEMPER- ATURE (°F.)	*101	ooff yalaniqe	18	81	63	æ	88	8	8	81	81	180	5	88	81	e1 60	70	91	S2	81	80	80	85	, 18	
72		noni	tog earuT LaudoA.	12.3	13.0	14.6	12.1	13.4	14.1	13.9	13.5	15.3	12.0	13.5	15.4	11.2	12.2	11,5	11.0	11.7	13.2	13.6	11.7	13.1	13.8	ľ
ន		77	Neps per yan	6:	ei 1-	ci L?	1:0	1.0	.; e;	9.0	8.0	1.0	1.0	1.2	1.9	9.0	8.0	0.6	0.5	8.0	9.8	0.5	0.8	0.5	0.5	
ध		33.	Reconness Cla		ເກ	0	7	ıs	13	6	es	rī,	-	13	ID)	63	es	4		77	*	4	င	#	₩.	
151	Trs.		Count-Wor	2,327	2,217	61	1,069	2,013	2,110	2,636	2, 183	2,367	2,512	2,465	2,453	1,607	0,010	2,050	1,816	2,330	2,100	2,213	9226	1,096	2,164	
ន	Test Results	DALLISTIO.	Work of Rupturo (inch-lb.)	230.4	190.4	110.6	196.8	169.2	180.4	263.6	207.2	101.1	250.8	108.8	171.0	100.0	213.8	203.0	211.2	238.8	208.8	219.0	874.8	107.6	210.4	
10	YARY T	æ	Counts Letual.	10.1	11.8	11.9	10.0	11.9	12.3	10.0	12.1	14.6	0.6	12.5	11.1	8.8	61	10.0	9.6	8.1	10.1	10.1	8.1	10.1	10.2	
18			Count.	1,117	1,070	818	F	639	057	970	996	1,018	1,107	1,000	1,150	152	080	736	5	874	246	020	724	677	£28	
17		LBA.	Strength (lbs.)	113.d	5.00		1.1	59.7	02.0	5.16	51.13	71.7	110.7	80.0	91.6	55.1	81.7	ci ei	13.4	107.0	73.1	0.00	87.2	0.70	81.0	
10			Connts .lento/.	10.1	11.8	11.0	10.0	11.9	12.1	10.3	0.11	11 5	10.0	3.5	11.3	8.2	8.1	10.2	5.0	8.1	10.2	0.0	8.3	10.1	10.1	
15		cy:	Turns per in	12.03	13.92	15.03	13.63	13.82	11.63	12.03	13.02	15.07	12.63	13.02	15.97	11.31	12.07	11.20	11.31	70.21	13.58	14.29	12.07	13.58	14.29	
13	Particulars.*		Draft.	5.10	el el	6.13	5.31	13. Ej	15 51	5.2	5.33	01 0	5.12	5.33	0.15	3.00	6:3	5.11	5.10	3.95	4.80	.1.89	18.1	6.55	6.53	
13	NE PARTIC	18	Spindle Speed It, P. M.	:	:	:	6,300	0.800	5,150	0,500	2,200	2,700	2,000	7,139	3,000	5,500	000'9	7,10	5,500	002'9	7,100	2,500	2,200	2,900	9,300	Pines : 16°
13	RING FRAN	Front Roller Speed, R. P. M.		191	180	571	181	170	111	103	130	178	5 6 6	100	180	180	192	17.1	182	102	188	160	916	216	918	Diameter of a
=	2	१७५ छ। १७५ छ।	Yara Braka: 100 splad Jour,	110	10	8	ß	102	87	13	12	82	6	S	12	33	8	ėi	<b>E</b> ]	61	5	18	41	18	•	
ñ			f.eso.I latoT	13.1	:	:	33.8	:	:	19.0	:	:	21.0	:	:	21.7	:	:	65.0	;	:	:	1.55	:	:	rollor
6	ENTAG	,,	Splaning Lo.	0.5	:	:	9.0	:	;	 	:	:	0.3	:	:	0.3	:	;	9.1	;	:	:	0,3	:	:	e front
œ.	Waste Pencentands.	.43,0,	Card Room I	9.9	:	:	12.0	:	;	10.8	:	:	10.3	:	:	13.1	:	:	13.3	:	:	:	11.9	:	:	Diameter of the frame front roller: 2"
,-	ST.M	.beo.l	Blow Room	13.1	:	:	12.8	:	:	8.9	:	:	19.7	:	;	9.4	:	:	10.0	:	:	:	11.3	:	:	10.00
٥	(lba.)	olqur	Velght of Sa	10			2			S			ន		:	13			2				2			o di Ci
12)		.Len	Counts Nonni	<u> </u>	2	#	ន្ទ	15.1	12B	2	ij	#	, s	임	Ħ	8.1	88	10B	8.1	833	10,4	103	85	10.4	103	•
4		200	Spinalog	3-2-31	3-2-31	3-2-31	4-1 33	4-1-33	5-1-33	10-2-01	20-2-34	20-2-34	19-2-35	19-2-35	19-2-35	4-2-36	. 4-2-36	\$ - <del>\$</del> - 30	5-1-37	17:17:	6-1-37	6-1-37	3-3-33	4-3-39	4-3-38	
3				1930-31	1030-31	1930-31	1932-33	1032-33	1032-33	1033-34	1933-34	1933-31	1836-33	1931-35	1934-35	1933-36	1035-36	1035-36	1030-37	1036-37	1030-37	1030-37	1937-38	1037-38	1037~38	
c)		·, .,, ·	Cotton.	Mandsanr	:	:	Mandeaur	· :	*	Mandeaur	:	:	Mandeaur	:	:	Mandeaur	:	:	Mandenur	:	•	:	Mandsaur	:	:	
1		e Camp		970 N	010	ę.	1601	1601	1601	9717	21.46	2146	889	2666	2000	1902	3064	3064	3434	3454	3454	3424	3956	3956	3956	

Table 9 (b).—SPINNING TEST RESULTS FOR UJJAIN COTTON.

• Diameter of ring frame front roller: 2. Diameter of rings : 14.

† It is to be noted that the total loss is for a small sample weighing 10 ibs.; for halk sample span under mill conditions it would be less than shown here.

### 10.-MOGLAI COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of mples of the first arrivals of the new crop.

ample No.	Cotton.	Place.	Season.	Weight (lbs.)
1604	Moglai	Partur	1932–33	11
2145	39	Partur	1933-34	9
2665	**	Partur	1934-35	12
3029	,,	Partur	1935-36	11
3458	,•	Partur	1936-37	111
3899	99	Partur	1937–38	11

I.—Spinning Tests.

### Treatment :-

- (a) Blow-room.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times). 1935-36 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 onwards:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

### Spinning Master's Report:—

### (a) Cotton:—

		Noora	J.		
1932-33.	1933-34.	1934-35.	1935-36.	1936-37,	1037-38.
Creamy-white .	White to creamy-	Dullish white to creamy-white.	White to creamy- white; brightish.	white; darkish	White,
Leafy .	Leafy	Leaty	Leafy		Very leafy.
Good .	Good roughlah ,	Good	Good	Fair	Rough.
Good .	. Well-ginned .	Well-ginned	Fairly well-ginned	Well-ginned	Well-ginned.
2% small size, ginned partly ginned an unginned.	1.1% unglaned			•	
Almost clean .	Good .	Clean	Clean	Good; slightly leafy	Almost clean.
	Good .	Good	Even and nep-free		
17.9 grams .	. 15.9 grams	20.4 grams	13.7 grams		free of nep. 14.3 grams.
Spots of stain and no	- 8 Ib. sample	!	••		44
	Creamy-white  Leafy Good Good 2% small size, ginned partly ginned and unginned. Almost clean Good 17.9 grams Spots of stain and man	Creamy-white White to creamy-white.  Leafy Leafy  Good Good roughlab  Good Well-ginned  2% small size, cinned partly ginned and unginned.  Almost clean Good  Good Good  Good Good  Good Good  Spots of stain and me S. D. compts	Creamy-white White to creamy- Dullish white to creamy-white.  Leafy Leafy Leafy Leafy Good Good Good Well-ginned Well-ginned Well-ginned Well-ginned Mell-ginned Good Spots of stain and ways B. sample	Creamy-white White to creamy-white to white to creamy-white.  Leafy Leafy Leafy Leafy Leafy Leafy Good Good Good Well-ginned Well-ginned Fairly well-ginned Fairly will-ginned Clean Good Good Clean Clean Good Good Clean Clean Good Good Even and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free Spots of stain and nep-free	Creamy-white White to creamy-white to white; brightish.  Leafy Leafy Leafy Leafy Leafy A triffe stained Good Good Well-ginned Well-ginned Well-ginned Well-ginned Well-ginned Well-ginned Well-ginned Well-ginned Good

### (b) Yarn :---

				Noc	ш.		
		1932-33.	1933-31.	1931-35	1935-36.	1936-37.	1937-38,
lizer e	••	Clean	Clean	Clean	Fairly clean	A little leafy .	. Clean.
4-	••	Even	. Comewhat uper en				Even.
-,	••	Practically nep-free	Free of nep	Limost free of nep	Free of nep	Almost free of mp.	. Free of nep.
	••			A little slabby			
	••	1 "	,	••	••		

Test Details and Results .- See Table 10 on page 110.

II.—GRADER'S REPORT\* FOR MOGLAI COTTON.

					Мобгл.	AI.		
			1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Contract valued under	:	:	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.
Class	:	:	Fine.	Fine.	Fine.	Fully good.	Fully good M. G.	Fully good M. G.
Colour	:	:	White.	Dull white.	White.	Fairly white.	Dull white.	Dull white.
Staple Length	:	;	3 inch.	f inch.	4 inch.	ß inch.	14 inch.	1. inch.
Staple Strength	:	:	Fair.	Fair.	Fair.	F. Good.	Good.	Good.
Regularity	:	:	Fair.	Fair.	Fair.	Good.	Good.	Fair.
Value above or below contract rate	rate	:	Rs. 10 on.	Rs. 10 off.	Rs. ö on.	Rs. 3 on.	Rs. 2 on.	Rs. 5 off.
Basis	:	:	Rs. 188.	Rs. 183.	Rs. 226.	Rs. 201.	Rs. 208.	Rs. 151.
Date of Valuation	:	:	9-1-33.	15-2-34.	8-2-35.	4-1-36.	8-1-37.	20-12-37.
Remarks	:	•	•	:	:	:	•	:
			* Roport since	* Report since 1933-34 is made up by the mill supplying the sample.	mill supplying the sample			

				•		Ę	ble	10.	SPI	Table 10.—SPINNING		ir R	SUL	TS F	OR N	<b>TOCI</b>	TEST RESULTS FOR MOGLAI COTTON.	OTTC	Ä.							
,	,	e	-1	13	•	~	<b>85</b>	e	5	11	12	13	=	22	10	11	18	10	ล	15	13	£ 2	j	3	20	\$1
-	" _	,		_	(	MA.	WASTE PER	Percentages!	1.8.1	# # # # # # # # # # # # # # # # # # #	Red Fre	Fring Paniers er.	פרו וביי.					Time In	Ting Irst Aescles	<b>5</b> 24	!		<u> </u>	TEMPER-	RELATIVE HUMIDITY (%).	63
					edi) o	'	-			non Ind	נטן,	·r	1	1		13.1.	•		Bertieric.		-		<del> </del>		-	
Sample	Cotton	Serson.	Dyla		oldmes	sol m	rsoJ #	*E507	1.1	engade dang es	. 71, , 71,	, ik o		.I.c.ì 1	Įm.,,	(hul)	dr.a.	ردوعا	Jeup-	, 177	d.b.		נ נפיץו	Ruotal	ltown.	*moo;
				Counts No	to sdato74	Elow Roo	Card Itoo	<b>Enlaniq</b> E	ol leuT	ati ati? Ualqa 001	l mat Ex II. II	्या चा !s	ाम्या	ri ening	l ties ()	discole	ocacus) substi	(, e)mho')	oll stat	Vegal-W Produc	-176.47	Zch La	Peinsle Latus la	Zujanjic	: Iqoolu	l Salies I
1005	Renth	1912-33	6-1-33	101		1 2	101	0.0	1:1	, r.	- <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del> - <del>-</del>	6,230		1:3	2	. 23	527	30	133.4	1027	•	777	12.d	15	<u>ا</u>	=
1001		1932-33	6-1-33	11		_	_		:	 E		7,300	;; ;;	13 92	. 6 11	r:	213	13.0	101.4	512.5	-	1.5	11.3	۶.	ı.	7.
1004	: :	1032-33	0-1-33	128		· -	· —			102	<u>-</u>	ē.	: ::	=	- 0 II	11 22	3,0,1	Ë	2	7.	-	7 7 7 7 7	11.3	j	ឧ	a
27.10	Veglai	1037-34	10-0-11	101	"	1 =	1 2	1 6	5 61	` {	E	37.0	់	157	: 3	-	5	! <u>:</u>	1	crr;	-	- -	1 ::	<u>                                     </u>		1 22
1 11			10-6-61 81	5		:	:		:	7.	î	1000	77	2,0		5	1, 3	6.11	7.9	'n	,•		17	7	<u>۔۔</u> ع	Ŀ
2143	:		20-2-34	12		,		:	:	20	<u> </u>	<u> </u>	., .,	<u>د</u> =	 	7	1.017	2.	1 1 1	1,231	, a		1	;		21
1		100	200	5	] :	6	9	ا ا	٤	1	}_;	3			1 2	! ::	! !:	1	;	1 7		-		7		3
2098			10-0-35	1	:					· ·	: :			23		28.3	Ę	11	12	# 7	• • •		13.6	7		t
2902			19-2-35	123		:	:	:		s	<u> </u>	57.	- <del>,</del> ;	1.7	7		* 184	r::	7::	¥.	19		7.	<del></del> -	\$	ĩ.
3020	Moglal	1935-39	11-1-36	6	£	12.0	=	 	1 7	=	1 7.			11.11	h (1)	1 7	; š	1 ::	1 7	1 7	;	- 3	1 6.0	::	:	8
3029	:	1033-30	13-1-20	101		:	:	:	:	~ ·	134	6.5	2.	12.43	13.0	57.0	C.	17.0	ī,	2,344		P. G	17.7	£	 3	ę
3020	:	1935-36	17-1-36	101		:	:	:	:	និ	ទី	3.	2.5	13.3	: 'E	11.1.3	1,115	30.0	213.4	÷1		0.3	13.0	<b>;</b>		₹
3028	:	1935-24	13-1-30	128		:	•	:	;	E,	2	8	۲	- F	:: ::		S	::	123.5	i	*7		11.0	<i>:</i> :	<b>.</b>	3
3158	Mogful	1930-37	15-1-37	60	2	1.0	1.3	6	i	-   c	   <u>E</u>	(6.5)	5	11.31	0 +		1 5	:	20.00	1 :	7	-	 	7	] 3	l a
3159	:	1036-37	12-1-37	10.1		:	:	:	:	 E	8	6.2.0	3.11	12,23	19.5	(8.2	450	Ë	ei ei	21.3	-	60	0.51	7	Ę	:
3458	:		12-1-37	á		:	:	:	:	Eu1	141	7,150	¥.	13 22	¥.	4	223	11.5	1.1.1	2,167		2.0	13.4	:	 3	S
3158	:	1070-37	13-1-37	125		:	:	:	:	 '}	<u>=</u>	  	·	11.53	11.1	11.25	٢	1:	173.4	212	,9		":	?	 ::	#! }•
3809	Moglai		11-1-39	20	2	10,0	19.3	6:3	É	3	1 1	123.7	3.21	==	1.5	135.1	15	1	331.0	1017	-	1.0.1	10 01	7	3	٤
2822	:	_	11-1-54	ĭ		:	:	:	:		7	6.50	5.73	5 2	T G	֝֝֝֝֝֝֝֝֝֝ <u>֚֚</u>	7.	<b>4</b> .	i.	Ť.	+	2.5	12, 3	;	c	Ç
3603	:	1 1977-34	11-1-33	101		:	:	:	:	6	ត		;;	17.3	17.3	* **	216	17.2	2.8.4	2,313	••	0.4	1.1	;	3	e
													•		-				•		-			-	-	

. Dissipated that the total free for a small entropie weighlier to file or the receipt per and entropies of the feet and the feet than above there.

### 11.—WESTERNS COTTON.

These samples have been tested by arrangements with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2254	Westerns	Guntakal	1933-34,
2749	Westerns	Guntakal	1934-35.
3151	Westerns	Guntakal	1935-36.
3686	Westerns	Raichur	1936-37.
4012	Westerns	Raichur	1937-38.

### I.—SPINNING TESTS.

### 1. Treatment:

- (a) Blow-room.—1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1934-35 onwards: - Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—1933-34:—Card. Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:-

						Westerns.		
				1933-31.	1931-35.	1935-36.	1936-37.	1937-38.
Colour	••	••		White to creamy- white; bright.	White to creamy- white; brightish.		Creamy-white to creamy.	White to creamy white,
Clennliness	••	••		Lenfy,	Lonfy.	Leafy.	Lenfy.	Leafy.
Feel			;	Good.	Good smooth.	Good.	Soft.	Fair.
Ginning and	neppine	158		Woll-ginned.	A trifle knotted.	Well-ginned.	Good.	Woll-ginned.
Secds	••	••	••	1.7% partly-gin- ned.		••		Contains some seeds.
Card Sliver				Clean.	Clean,	Almost Clean.	Leafy.	Fairly clean.
Card Web	••	••	٠.	Even and nep- free.	Even and nep- free.	Good,	Fair; a little neppy.	A trifle neppy.
Weight of 16	) flat str	ips	••	13 · 8 grams.	18-2 grams.	13-6 grams.	23 · 6 grams.	17·7 grams.
Romarks	••	••	••			:.		
(b)	Yarn	·:	:	•		· · · · · · · · · · · · · · · · · · ·		
					West	Terns.		
				1033-34,	1934-35.	1935-36.	1936-37.	1037-38.
Cleanlinery	•••	.,		Almost clean.	Cloun.	Almost elean.	Fairly loafy.	Fairly clean.
Evenness	••			Fairly oven.	Fairly ovon.	Fairly even.	Fairly even,	Evon.
Neppiness	•			Free of nop.	Almost free of nep.	Almost free of	Almost free of	Fairly free of nep

nop.

Slubbiness

<sup>3.</sup> Spinning Test Details and Results: -- Sec Table 11 on page 113.

II.—GRADER'S REPORT\* FOR WESTERNS COTTON.

			Westerns.		
1	1933-34.	1934-35.	1035-36.	1936-37.	1937-38.
Contract valued under	Broach.	July/Aug. Broach.	Broach April/May.	July/Aug. Broach.	Broach April/May.
Class	Striot fine.	Fine.	Fine.	Fully good.	Fully good.
Colour	. White.	White.	Brownish white.	Brownish white.	Brownish white.
Staple Length :	31/32 inch.	Barely 13/16 inch.	29/32 inch.	13/16 inch.	I inch.
Staple Strength	Good.	Fair.	Fairly Good.	Fair.	Fair.
Regularity	Good.	Very irregular.	Regular.	Slightly irregular.	Irregular.
Value above or below contract rate	Rs. 35 on Apr./May Broach. Rs. 25 on.	Rs. 25 on.	Rs. 35 on.	Rs. 5 on.	Rs. 3 on.
Basis	Bs. 183.	Rs. 232.	Rs. 203.	Rs. 225.	Rs. 164.
Date of Valuation	1st May 1934.	3.7-35.	20-4-36,	28-6-37.	25-3-38.
Remarks	;	:	:	:	:

\* The reports for 1933-34 and 1935-36 enwards are made by the mill supplying the sample.

	· 13	3719	~	Testing Room.	ಚ	1.	20	25	18	ť	25	69	Ę.	1 %	şē	8	68	89	99	
١,	50	RELATIVE	<u>ಲ್</u>	Spinning Room.	g	5.	8	2	7.	<b>[</b> :	8	69	80	1:	08	8	60	co Co	<del></del>	
	35	TEMPER-	(F.)	spinning Room.	- S8	88	æ	87	37	28	88	SO	6S	87	ŝ	80	ä	06	06	
	75			Turns per inch.	17.4	10.3	\$! es	17.1	19.0	äi	17.2	19.0	0:5	17.3	19.1	11.0	14.9	10.9	18.3	
	83			Zeps per yard.	2:	1.5	::	9.0	1.9	5:	1.2	1.9	1.0	1.9	1.0	0.9	9.8	6:	0.8	
	21			Dyenness Clars.	7	+	17	7	4	13	+	_	13	-		57	63	e3		
_	12	SULTS.	5	Count-Work Product.	5700	2130	2107	2560	2370	2564	9330	2501	1212	2233	2361	5895	2272	2190	2208	
TON	ខួ	Vany Test Resours	Ballistio.	Work of Rupture (inch-lò.)	123.0	100.8	e1 ૐ	130.1	107.2	87.18	127.8	105.2	33.3	113.6	99.3	8.101	130.1	103.4	2.701	
COI	e	Yan		Counts Actual.	19.0	:: ::	20.3	19.7	23.6	39. 6	20.0	83.6 83.6	1.05	20.1	23.8	14.0	16.3	30.3	20.0	
ERNS	18			Connt-Strength Product.	16'79	1513	1392	1000	1550	1113	1331	1280	1310	1115	1390	1313	1219	1090	1290	
ESTI	11		LF C.	(.edl) त्रध्रकश्चर	7	62.8	5.5	55.0	67 1		67.5	5.5.5	6.5	21.2	57.3	92.1	71.8	53.6	02.0	
OR W	55			Counts Actuel.	10.0	::	::0:	10.6	33.1	30.1	20.5	:: ::	- 62 - 62	20.3	21.1	11.3	16.3	20.5	20.8	
TS F	15			Turns ber luch.	17,93	19.73	::	20 21	19.72	23.11	17.98	19.73	23.26	17.93	52 23	11.98	15.07	17.03	19.20	
SOL	Ξ	TLARS.		אנייוני	6.07	5.67	#6 y	7	5. 3.	6.58	5.95	5.67	10.0	5.05	0.00	1.07	12.5	5.03	5.80	
TEST RESULTS FOR WESTERNS COTTON.	22	13 WE PARTIC	l'raue Particulars.•		Spindle Speed,	9550	9200	9750	9650	0096	0096	0220	9550	8000	9350	0016	8820	9300	0016	00001
	¥ .	RING TRAWS		Front Roller Speed, R. P. M.	194	2.	821	196	170	121	103	176	143	10.2	177	215	21.5	193	100	
Table 11.—SPINNING	=	=		Farn Breskwers per 100 spladles per hour.	13	갦	Ŀ	10	14	30	31	13	98	10	13	ଖ	či	10	ຄ	
SPIR	٤	zi		f.e-o.l fato?'	10.4	:	:	31.4	:	:	16.6	:	:	£3.+	:	23.0	:	:	:	
	G	ENTAG!		Splaning Loca.	0.1	:	;	0.4	:	:	0.4	:	:	0.3	:	0.4	:	:	:	
le 1	æ	Weste Percentages.		Card Room	8.0	:	:	9.8	:	:	2.0	:	:	14.8	:	11.0	:	:	$\exists$	
Tab		K157		Blow Room	0.51	:	:	19.5	:	:	9.1	:	:	15.8	:	13.0	:	:	:	
	.5	('#	(1) ol	Welght of Samp	92			22	-		10			9		10			_	
	ا د،		•	Counts Zominal		ಕ	စ္တ	20.1	77	ន	20.1	ಕ	99	20.A	<b>#</b>	#	16	20A	203	
	-			Date of Spinning.	30-1-31	1-5-34	1-5-31	21-6-35	20-0-33	20-C-35	23-4-36	92-1-36	23-1-36	6-7-37	7-7-37	26-4-38	21-4-38	21-4-33	SC-1-03	
	e			.Netson,	1933-34	1933-34	1033-34	1934-35	1934-35	1934-35	1935-36	1935-36	1935-36	1936~37	1936-37	1037-38	1937-38	1937-38	1037-38	
	2)			Cotton.	We-terns	Westerns	Westerns.	Westerns	Westerns	Westerns	Westerns	Westerns.	Westerns	Westerns	Westerns	Westerns	Westerns	Westerns	Westerns	
	-			Sample No.	1555	7000	1555	27.03	07.5	01.2	3151	3151	3151	3080	3080	1013	1013	2101	-1012	

\* Diameter of ring frame front roller—i. Diameter of ring frame front roller—i. Diameter of rings—11".

† It is to be noted that the total fost is for a small sample weighing 10 lbs.; for a bulk sample spun under mill conditions it would be less than shown here.

This cotton shows signs of deterioration in quality since 1031.35.

### 12.—MIRAJ COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2532	Miraj	Shedbal	1933-34
2750	Miraj	Shedbal	1934-35
3270	Miraj	Shedbal	1935-36
3687	Miraj	Shedbal	1936-37
4011	Athni	Shedbal	1937-38

### I.—Spinning Tests.

### 1. Treatment:-

- (a) Blow-room.—1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
  1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

### (a) Cotton:

						Miraj.		
_	<del></del>			1933-34,	1 <b>934</b> -35.	1935-36.	1936-37.	1937-38.
Colour .,	.,			Creamy-white.	Creamy-white	Creamy-white.	Creamy-white.	Creamy-white
Cleanliness				Leafy.	Leafy.	Leafy.	Fairly leafy.	Leafy.
Feel				Soft silky.	Poorish feel.	Good.	Good.	Good.
Ginning and ne	рривеьз	••	••	Well-graned.	Somewhat knotted,	Somowhat knotted.	Woll-ginned.	
Seeds	·		••	1% partly-ginned.				Contains cut as whole see 0.55%.
Card Sliver	••		•	Clean.	Almost clean.	Almost clean.	Good ; n little loafy.	Fairly clean.
Card Web	••		••	Even & nep-free.	Good.	Good.	Good ; nep-free.	
Weight of 10 f	at strip-			15 · 5 grams.	16·3 grams.	15.0 grams.	20 · 0 grams.	14.6 grams.
Remarks			٠.					

### (b) Yarn :--

			٠,			Miraj.		
	_			1933-34.	1934-35.	1937-36.	1936-37.	1937-08.
Cleanliness			•••	Almost clean.	Almost clean.	Almost clean.	Fairly clean.	Almost clean.
Evennes	`. <b>.</b>		••	Fairly even.	Even.	Even.	Even.	Even
Zeppines	••	••	••	Free of nep.	Nep-free.	Practically free of nop.	Free of nep.	Fauly from of nep.
Slubbiness	••	••				A little slubby.		

<sup>3.</sup> Spinning Test Details and Results: -See Table 12 on page 116.

## II.—GRADER'S REPORT FOR MIRAJ COTTON.

4	1					Мпал.		
			•	1033-34.	1934-35.	1935-36.	1936-37.	1937-38.
Contract valued under	; ;	.:	:	Broach.	July/Aug. Broach.	Broach July/Aug.	July/August Broach.	Broach April/May.
Class	:	:	:	Fully good.	Fully good.	Fully good.	Fine.	Barely Fine.
Colour	:	:	:	Creamy to light brown.	Brownish.	Brownish.	Brownish White.	Brownish White.
Staple Length	:	:	:	13/16 inch.	Barely 3/4 inch.	3/4 inch.	7/8 inoh.	7/8 inch.
Staple Strength	:	:	:	Fair.	Fair.	Good.	Good.	Good.
Regularity	:	:	:	Fair.	Somewhat irregular.	Fair.	Regular.	Begular
Value above or below contract rate	· contra	ict rate		Rs. 15 on April/May Rs. 20	Rs. 20 on.	Rs. 6 off.	Rs. 15 on.	Rs. 20 on.
. Jasis	:	:	:	Rs. 183.	Rs. 232.	Rs. 220.	Rs. 225.	Rs. 164.
Date of Valuation.	:	:	:	1-5-34,	3-7-35.	1.7.36.	28-6-37.	25-3-38
Remarks	:	4:	:	•	:	:	•	
								•

\* The report for 1933-34 and 1935-36 onwards is made by the mill supplying the sample.

							,	1		,								
	ei ei	ATIVE	Horinarr (%).	Lesting Boom.	8	12	3	8	7	12	:	<u>.</u>	Ę	æ	9	8	2	<b>6</b>
	Si	TEN	Can	spinning Room.	జ్ఞ	2	99	55	11	Ę	73	ľ	ي	E	t	පි	3	8
	ij	TEMPER-	(°F.)	Splanlag Room.	8	88	88	88	88	82	87	87	8	90	80	٤	70	16
	7.			Turns per luch. Actual.	17.3	18.0	19.0	17.3	18.8	15.2	10.9	18.A	16.3	17.19	10.0	12.1	17.3	18.0
	ន			Reps per yard.	1.0	.:	1.0	0.5	0.8	1.2	0.8	1.0	0.5	9.0	0.5	1.0	1.0	÷1
	ध			Lyenness Class.	-	13	13	83	*	e.	7	-	6:	**		-	7	•
	Į.	ę.		Count-Work. Product.	2236	2207	8375	2703	2003	2341	2015	2116	9710	2492	2489	2403	2000	1304
	0 <b>3</b>	YARY TFST RPADLES.	BALEISTIO	Work of Rupture (inch-lb.)	111.8	2.10	89.1	132.6	114.8	143.0	110.2	80.8	100.1	121.0	100.8	157.8	112.0	86.5
TON.	10	YARY TF	e	Counts Actual.	20.0	61	21.7	20.4	23.5	10.0	20.1	ខ្មុ	0 01	20.0	23.3	15.8	20.2	8
COI	7.		Ī	Count-Strength Product.	1360	1151	1272	1831	1087	1438	1285	1062	1672	1563	1611	1593	1111	12.2
IRAJ	11	'	LEA.	Strength, Ibs.	60.0	10.4	51.3	03.1	71.5	80.0	63.3	43.0	104.3	78.0	64.3	101.1	20.2	£0.3
R M	16	,	1	Counts Actual.	19.8	8.12	24.8	10.7	23.0	16.0	20.3	3.5	16.0	20.1	3.5	15.6	20.1	 ::
EST RESULTS FOR MIRAJ COTTON.	13	-	 ا	Turns per Inch.	17.08	19.73	20.71	17.03	10.73	15.07	17.08	19.73	15.07	17.98	10.73	16.07	17.08	19.73
SUL	11		CUL-BR.	Draft.	5 33	0 53	6.58	5.03	6.23	5. 43	62.20	0.10	5.51	3.	5.71	6.43	6.10	0.10
T RE	13		FRINK PARTICULIES.	Spladlo Speed, R.P.M.	9550	9500	0000	9550	9550	8000	9500	0000	8300	9250	0220	9350	10300	10000
H	15	Į.	RING FR	Front Roller Speed, R. P. M.	100	176	178	105	178	108	102	102	101	192	173	217	214	187
Table 12.—SPINNING	11			Yarn Breakages per 100 apludics per inour,	16	98	325	93	41	9	ត	20	e	ι.*	=	9	11.	:2
PIN	5		.62	f.eeo.I lato.T	8	:	:	10.2	:	10.7	:	:	17.5	:	:	21.2	:	:
81	۵		CFNTAG	Spinning Loss.	7.0	:	:	0.4	:	0.3	:	:	0.1	:	.:	0.0	:	:
le 13	œ		Waste Percentages.	Card Room Loss.	7.0	;	:	9.3	•	8.0	:	:	5 6	:	:	0 1	:	:
Tab	1-		WAS	Hlow Room Loss.	13 0	;	:	10.0	:	11 0	:	-	8		:	13,8	:	:
	9		_	Weight of Sample, Ibs	2			2		g			£			10		
	13			Counts Rominal.	ន	34.	213	ន	<b>3</b>	۳	ខ	នី	ä	ន	ěi.	10	ន	21
	-		,	Date of Splaning.	30-1-34	1-6-34	1-5-31	21-0-35	21-0-35	14-7-30	13-7-36	14-7-36	7-7-37	8-7-37	8-7-37	19-1-38	10-1-38	20-4-38
	!			Beason.	1033-34	1933-31	1933-34	1934-35	1034-35	1935-30	1935-30	1035-36	1830-37	1030-37	1036-37	1037~38	1037-38	1037-38
		-			-	-:	-	<u>                                     </u>	-	:	-	:	:	<del>-</del>	-	:	:	-
	e:	·   -		Cotton.	Mirai	Mira]	Miles	Miraj	Miraj	Mira	Mira]	Mhra]	Mira	Miraj	Mroi	Athni	Athul	Athni
	-			Sample No.	2253	2253	2253	2750	2750	3270	9270	. 3970	3637	2087	2697	1011	101	4011

• Diameter of Ring Frams front roller—i.\* Diameter of rings—14°.

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would to less than shown here.

### 13.—SURAT COTTON.

These samples have been tested by arrangement with the Bombay Millowners' tion, Bombay, who have very kindly agreed to arrange for the supply each season less of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	$Sample\ No.$	Cotton.	Season.
1075	Surat	1930-31	3142	Surat	1935-36
1747	Surat	1932-33	3577	Surat	1936-37
2278	Surat	1933-34	4025	Surat	1937-38
2752	Surat	193435			•

I.—Spinning Tests.

### atment :---

(a)

b)

- Blow-room.—1930-31:—Porcupine, Crighton (once only), Hopper, Scutcher (3 times).
  - 1932-33 and 1933-34:—As above but two passages in the Crighton. 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
- 1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

inning Master's Report:-

(a) Cotton:—

	Ì				Surat.			
-		1930-31.	1932-33.	1933-31.	1931-35,	1935-36.	1930-37,	1937-38.
••	•••	White; bright.	White to creamy- white.	White; bright.	White; bright.	White; bright.	White.	White.
		Pairly clean.	l'airly clean.	A little leafs .	Pairly clean.	A little leafy.	A little leafy.	Contains some leaf.
••	•		Soft and bodied.	Good silky.	Good soft.	smooth-bodied.	Good-bodied.	Good soft.
**************************************		(10011-2011-11)	Very well-ginned.	Well-ginned.	Well-ginned.	Well-glaned.	Well-ginned.	Well-ginned.
Nepple		1.25% unginned.	*	•		Contains a few un- ginned seeds.		
		Clean.	Olcan.	Almost clean.	Clean.	Clean.	Clean soft.	A trifle leafy.
••	•	Good.		Good.	Even and nep-	Even and nep- free.	A little neppy; otherwise good.	l'air; a tritle neppy.
Ant sir	dp⊲.	6.7 grams; very		15,6 gram*,	15.0 grams.	11.7 grants.	15.1 grams.	16.8 grams.
••	••	8-lb. tample.	••		<u> </u>	••	<u> </u>	<u></u>

(b) Yarn:-

				SURAT.	•		
-	1930-31.	1032-33.	1033-34-	1934-85.	1935-36.	1036-37.	1937-38.
	Clean. Even. Nep-free.	Clean. Even. Free of nep.	Clean. Even. Free of nop.	Clean. Liven. Practically nep free.	Clean. Fairly-even. Almost free nep.	Fairly clean. Even. of Almost free of nep.	Fairly clean. Even. A little neppy.

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nning Test Details and Results .- See Table 13 on page 119.

II.—GRADER'S REPORT FOR SURAT COTTON.

						Surat.	<u> </u>		•
			1930-31.	1032-33.	1033-34.			1936-37.	1037-38.
Contract valued under	:		. Broach.	F. G. M. G. Broach Hedge Contract	Broach July/Aug.	'Ang.	April/May Broach 1936.	Broach April/May 1937.	Broach April/May 1938.
Class	:	•	Fine.	No. 2. Superfine.	Superfino.	Superfine.	Eme to Superfine.	Fine to Superfine.	Fine to Superfine.
Colour	:	:	White.	Clean white.	White; bright.	White.	White to Creamy-	White.	White.
Staple Length		:	One inch.	15/16" average.	31/32".	15/16".	Full 31/32".	15/16".	7/8" full.
Staple Strongth	:	:	Fair.	Good.	Good.	Vory good.	:	Good.	Good.
Mogularity	:	•	Fair.	Evou.	Vory regular.	Rogular.	Regular.	Regular.	Rogular.
Value above or bolow contract rate	ract ra	:	Rs. 80 on.	R4. 50 on.	Rs. 72 on.	Вя. 93 оп.	Rs. 50 on.	R4. 60 on.	Rs. 65 on.
Basis	:		Rs. 160.	F. G. M. G. Broach Contract No. 2	Rs. 198.	Broach July/Aug. 1935 Rs. 203.	Rs. 203.	Rs. 230.	Rs. 157-2.0.
Date of Valuation	:	:	10-6-31.		30.5-34.	•	20.1.36.	4.6-37.	3.6-38.
Remarks	:	:	:	:	:	:	:	Contains little peppery leaf and yellow stains.	Less neppy than last year though staplo little short,

\* Roport since 1932-33 is made by the Mill supplying the sample.

COLLON.
R SURAT
FOR
RESULTS FOR
TEST
13.—SPINNING
Table

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RELATIVE HUMBITY (%).	<del> ,</del> .	Testing Boons.	65 65	99 89	09	99 29	. 69	68 68	02 2	13		. 73	0 70	: -	P	99	8	7 63	7. 67	89	_
		Spluning Room,	_				- E		<b>4</b>	l E	<u></u>	23	<u>چ</u>	5	ž	150	89	0.7	7.0	8	_
TENTER ATORE (°F.)		Shiming Room.	 	23	87	S	es S	6	8	12	86,	87	88	SS	S.	ន	8	16	06	GS	_
		Turns por inch Letusk.	18.7	23.0	19.3	<u> </u>	17.1	18.8	6.05	17.3	18.9	90.8	17.3	19.0	20.8	17.3	19.0	20.0	17.9	18.9	
		Zebs dot dang	0.7	0.5	1.2	0.9	1.0	1.2	::	1.0	1.2	1.5	23.	0.8	1.5	1:3	1.5	1.9	0.9	1.8	•
·		Кусписая сілаз.		13	65	<del>-</del>	e	7	13	89	<del></del>		e	•	ະລ	က				e	•
TLT4.		Count-Work Product	2528	56.2	2765	2112	2050	2586	01:21	1987	2877	18781	1055	2010	2055	2701	2736	2736	2773	2732	•
Yarn Test Results.	Haleistic.	Work of (inch-lbs.)	103.2	9 7	0.001	52.1	133 8	10% 2	87. 6	1.02.1	121.0	1.10	127.8	116.2	71.98	131.1	111.0	0.00	134.6	112.8	-
Yary	_	Counts Actual.	2.13	39.5	61. E	1.01	19.8	23.0	0 65	20.1	23.9	20.5	£ 05	8.77	30.8	1 08	21.0	30.4	9.0g	 	
		Count-Strength Product.	1194	1301	1565	1201	1735	1650	1516	1819	1730	1550	1015	1685	1121	18:33	1699	1531	1863	1815	
	[,63.	(.edl) dignorië	61.2	E.3	5.5	7:3	9 2 8	600.3	;=	84.7	73.7	- <u> </u>	8 %.	71.0	17.2	91.9	70.2	51.7	90.0	73.5	
		.feulaf. etnuo!)	17:55	30.1	6	30.3	30.2	23.8	81	20.5	23.6	20.7	20.5	6.51	30.1	20.0	24.2	30.0	20.0	2:1	
		Joint 19g eutin?	19.73	23.11	19.73	23.11	17.9	10.73	21.76	17.03	10.73	8 8	17.93	19.73	21.80	17.98	19.73	21.80	17.08	19.73	•
ULARS.		Draft.	5.01	.; ::	5.33	60	5.01	57	6.53	6.05	5.5	6.71	5.95	6.33	0.76	6.14	5.31	6.67	0.02	5.20	•
D PARTIC	, n.	Spindle Speat, IL.I	9800	0200	9000	10300	0000	9550	9550	9330	9550	0096	9300	9200	8550	9300	0010	0450	10300	10200	•
RING FRAND PARTICULARS.	,thas	Front Roller Spo R.P.M.	551	158	178	168	196	173	791	105	071	091	198	151	ĪŦĪ	161	170	160	213	101	•
æ	lot loc	Yarn Brenkeges 100 spludies hour,	ន	2	Z	es S	12	ļ:	21	, c	81	21	0	=	13	1.9	18	1-	•	118	
159.	<u> </u>	Tasal lasa.†	11.3	:	13.3	•	11.0	:	:	=	:	:	1.3	:	:	11.5	:	:	15.9	;	
Waste Percentages,		Spinalng Loss.	0.7	:	0.5	:	0.3	;		61.5	·.:	:	:	:	:	0.3	:	:	0.3	:	_
TE PER		Card Room Loss.	8.u	:	7.	:	15.30	:	:	7.0	:	:	7.0	:	:	6:	:	:	0.1	:	
WAS	-	llow Room Loss	61	;	 	:	5.5	:	:	6.6	:	:	-	:	:	f. 6	:	:	12.0	:	
	(.kdf.) c	Welght of Sample	w.		2		2			g			10			2			2		_
		Counts Rominal	7.	8	51	8	ន	51	e	a	<b>61</b>	ä	ន	ដ	8	្ន	<u> </u>	ຂ	ន	Ť	
<u></u>		Date of Spinning.	10-0-01	10-6 31	23-1-33	2-5-33	16-5-31	16-5-31	16-5-31	21-0-35	55-6-35	25-6-35	17-4-30	16-1-36	16-1-30	29-4-37	22-1-37	23-4-37	20-1-33	27-4-38	
		Serson.	1930-31	10-0101	1032-33	1932-33	1933-34	1033-31	1933-31	1934-35	1934-35	1034-35	1935-36	1935-36	1935-36	1936-37	1930-37	1936-37	1937-38	1937-33	
· 		Cotton.	Surat. 10		Surat. 1		Surat.		Surat.	Sarat.		Surat.	Surat.	Surat.	Surnt.	Surnt.	Surat.	Surat.	Surat.	Surat.	
		Sample Co	1075	1075 S	1747		8725	8755	8755	27.58	2739	2759	3113	3142	3142	3577	3577	3577	4025	4023	

Diameter of ring frame front roller—#. Diameter of rings—1#.
It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereadout; for bulk sample spun under mill conditions it would be less than shown here.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)
1076	Navsari	1930-31	11
1778	••	1932-33	20
3141	•,	1935-36	11
3683	29	1936-37	11

### I.—SPINNING TESTS.

### 1. Treatment :-

(a) Blow-room.—1930-31:—Porcupine, Crighton (once only), Hopper, Scutcher (3 times).

1932-33:—As above but two passages in the Crighton.

1935-36 and 1936-37:—Hopper bale opener, Horizontal cleaner. Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Soutcher (3 times).

(b) Card-room.—Upto 1932-33:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1935-36 and 1936-37:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :--

### (a) Cotton:-

		1		7.47	gari.	
			1930-31.	1932-33.	1935-36.	1936-37.
Colour			White; bright.	White; very bright.	White ; bright.	White.
Cleanliness			Fairly clean.	Fairly clean.	Clean.	A little leafy; a triffe
Feel		٠.	Good-bodied.	Silky and bodied.	Good.	stained. Good bodied.
Ginning and Ne	ppiness	٠,	  Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	••	٠,	0.5% unginned.		,,	
Card Sliver			Clean ; silky,	Clean and full.	Clean.	Good
Card Web			Very good.	Even and nep-iree.	Even and nep-free.	Good ; a little neppy.
Weight of 10 fle	ıt atripe	٠.	6.5 grams; very light.	15·1 grams.	11 · 7 grams.	22.2 grams.
Remarks	••	••	8 lbs. sample.			

### (b) Yarn:-

			Z	Avsari,	•
	i	1930-31.	1932-33,	1935-36.	1936-37,
Cleanliness		Clean.	Clean.	Clean.	A little leafy.
Evenness	. ;	Even.	Fairly even.	Even in the lower counts.	Even.
søniqqoV		Free of nep.	Free of nep.	Almost free of nep.	A little neppy.
Slubbiness	• •				
Remarks	.,	••			

<sup>3.</sup> Spinning Test Details and Results: -See Table 14 on page 121.

	,	•	•	:				II.—(	RAD	II.—GRADER'S	REPORT FOR NAVSARI	RT F	OR A	AAVS,	ARI C	COTTON.	ON.								1
<u> </u>	ļ.	-	;					1930-31.	31.				1932-33.	•				1035.36.*				1936-37,	.37.		· .
Contract	Contract valued under	nder ;	:	:		. Broach.	ach.			anterna en ante	F.G.M	G. Bron	ch Ifrelg	F.G.M.G. Broach Hedge Contract		April/3	May Bro	April/May Broach 1936.			Brone	Broach July/Aug. 1937.	kug. 193		
Class		:	:	:	•	Fine.	ż				Strict fine.	fine.				Fine to	Fine to S. Fine.	•.			Fine 1	Fine to superfine.	no.		
Colour		:	:	:	•	. White.	ite.				Clean white.	white.			<del></del>	White	to Crean	White to Creamy-white.	,		White.	ė			
Staple Length	math	· ·	•:	. ) ,,	٠	1,18					, er				<b>-</b>	Full 1".	.•			-	15/16″.	V.			
Staple Strength	rength	:	:	:	•	. Fair.	į				Good.							:		-	Good.				
Regularity	ty	:	: :*	:	•	. Fair.	ė				Good.					Regular.	ţ				Regular.	lar.			
Value ab	ove or be	Value above or below contract rate	act rate	. :	•	. Rs.	Rs. 90 on.				R4. 50 on.	om.		4		Rs. 35 on.	on.				Rs. 65 on.	g on.			
Basis		:	:	:		<u>.</u>	Rs. 160.				July/:	July/August Rs. 205.	14. 205.			Rs. 203.	نبم				R3. 207.	37.			
Date of	Date of Valuation	;	:	:	•	10-e	10-6-31.				29-5-33.	33.				20-1-36.	ģ			<del></del>	22-7-37.	37.			
Remarks	**	:	:	:	•			:					:					:		<b>-</b>		•	:		
						F	Table	7	* Reports for 193	ات ایا	TEST	5-36 are made by RESULTS	JLTS	FOR mill	supplyi NAV	supplying the sa NAVSARI	COLTON.	TON.							
ī	¢I	es	7	13	9	۲-	<b>60</b>			61	13	=	12	10	11	18	10	0.7	ដ	얾	23 2	21 25		26	27
					_	1 m	ISTE PEI	Waste Percentages.	_	RING F.	RING PRANE PARTICITARE.	TICTI VRE.					Хллх	YARY TEST RESULTS.	SULTS.			ST.	TEMPER- ATORE	RULATIVE HUMIDIEY	1 to 1
					(lbar)				001 13						LEA.		Ħ	Ballistic.				<u>1</u> 	<u> </u>	-	{
Sample No.	Cotton.	Scaron.	Date of Spinning.	Counts Nominal.	olymak 10 talple?	Plow Room Loss.	Catel Room Loss,	splaning Loss. TesoI Lose.†	Zutt Brechege per	Front Roller Sp.	Spladle Speed, It.	Draft.	Luxus per luch.	Counts Actual.	Strength (lbs.)	Count-Strength Product.	Jantol. elmoo	Work of Runture (inch-lba)	Count-Work Product.	Тум ипеъь СТавя.	Xeps per yard.	Turns per Inch, Actual,	Splaning Room,	Spinulug Room,	Testing Room.
1076	Navsari	1030-31	10-0-31	61	6	6.9	7.0	0.0	13.0 5	182	0050	5.81	10.73	23.1	0.00	1538	23.5	103 3	2125		1.5	19.1	8	8	20
•	:	1930-31	10-6-31	<u>ຂ</u>		:	:	:	ñ	_	9930	7.50	23.11	30.5	41.0	1312	30.0	\$0.1	2160	.:. -::	1.3	12.4	99	- 80	89
1778	Хаузан	1032-33	24-5-33		2	7.5	8.3	0.1	15.5 5.		0010	() ()	10.73	 	66.2	1569			25%b		_	18.9	80	<u> </u>	20
1778	:		27-3-33			+	:	<u>-</u>	_	33 157	0070	6.84	11.83	30.0	£ .	1350	+		1112	ا د،	+	20.3	08	4	88
3141	Naveari		12-1-36	ន	<b>a</b>	_	1	1	10.0		0450	5 5	10.73	3 6	8.18	1583	7.67	117.0	1607		0.1	17.5	90 8		1. 1
3141		1027-36	17.1			: :	: :	: :			8700	7.14	21.80	20.2	17.0	1413			2676	. 13		11.1	80 80		1 1
3083	Naveari		1-7-37	<del> </del> -	12	+	تا	0.5	1	뉴	10200	0.02	17.98	10.0	2.90	1024	┼	÷	2002	60	╁-	17.3	88	+	182
3083		_	2-7-37			:	:	:		193	10200	5.45	10.73	23.6	70.5	1876	24.0	120.0	2830	<b></b> -	2.5	10.2	86		80
3683		1936-37	2-7-37	음 		:	:	:	61 	26 159	0420	6.36	21.80	20.1	50.1	1720	30 0	93.4	2802	<del></del> -	8:0	21.1	87	5	<b>1</b> 8
				. Diam	neter of	ring fram	e front n	oller—1.	Diameter	. Diameter of ring frame front roller-1. Diameter of rings-11.															1

:

• Diameter of ting frame front roller—J. Diameter of rings—11...

† It is to be noted that the total loss is for small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

### 15 (a).—TIRUPPUR CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Collon.			Season.
1077	Tiruppur Cambodia			1930-31.
1748	Tiruppur Cambodia	• •		1932-33.
2277	Tiruppur Cambodia			1933-34.
2753	Tiruppur Cambodia			1934-35.
3269	Tiruppur Cambodia	.,	• •	1935-36.
4033	Tiruppur Cambodia			1937-38.

### I.—SPINNING TESTS.

### 1. Treatment :-

- (a) Blow-room: Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). In 1930-31, it was passed only once thro' the Crighton.
   1934-35 onwards: Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room: Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
   1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Cotton:-

						Tinoppur Ca	MDODIA.		
		• 		1930-31	1032-33.	1933-34.	1031-35.	1935-30.	1937-38.
Colour				Creamy-white to	Creamy-white.	White to ercamy- white.	White to creamy- white; bright.	White to creamy-	Creamy-white.
Cleanliness	••	••	••	Fairly clean; occa- sional stain.	Clean.	Fairly clean; occa- sionally stained.	Clean.	l'airly clean ; slight- ly stained.	Cican.
l'cei		.,	,.	Good-bodied.	Good soft.	Good smooth.	Good bodied.	Softleh	Soft.
Glaning an	d Nep	piness	••	Well-ginned, but slightly neppy.	Well-glaned.	Slightly knotted in ginning.	Fairly well-ginned.	A little knotted.	Well-ginned.
Seeds									
Card Slive	r	••	٠.	Clean.	Soft and clean.	J	Clean and soft.	Almost cleau.	Clean.
Cazd Web	••	••	••	A little neppy and cloudy.	A trifle both neppy and uneven,	Neppy .	Somewhat neppy and uneven.	Somewhat neppy.	Very neppy.
Weight of	10 <b>fi</b> at	t strips		19.0 grams.	25,8 grams.	20.5 grams.	23. 3 grams.	20.1 grams.	26.1 gmms.
Remarks	••	••	••			Well-watered	••	Well-watered at the time of pressing.	
					1			tento as bassorates	

### (b) Yarn:-

	_		l <del></del>		Tindepor Car	SDODIA.		
			1930-81.	1932-33.	1933-34.	1934-35,	1935-30.	1937-38.
Cleanliness		••	Fairly clean	Almost clean.	Almost clean.	Clean.	A little leafy.	Fairly clean
Evenness	••	••	Even.	Et en.	Even.	Even.	Even.	Even
Neppinces	••	••	A httle neppy.	A little neppy.	Somewhat neppy.	Neppy.	Керру.	Neppy.
Slubbiness	••	••			Somewhat slubby.		Fairly slabby.	
Remarks	••	••						

Spinning Test Details and Results: - See Table 15 (a) on page 124.

	1	l _	1		•	1	Į	i	1	1
	15	Recure		mar n rups 1	5 3	2 3	0 8 5	355	3 5 5	3 3 3
	2	Ret		at pupp 2 Room.	t =	7 : :	5 4 5	n a a	7 7 7	ετο
	ខ	Trupte.		annost a tar d fr	1 2	7 7	1:23	177	7 7 7	222
	ž		-Jr n	In the petitol and the	2 3	15.9	1 2 5 5	1:1	110	17.1
	ε			the credit list	1 7 7	1 2 12	457	13.5	7 3 5	2 6 3
Ä.	<b>a</b>		 }	ind the analysis	<b>-</b> ,7	-		,		
OTT	5	`E = ( T }.		Antiderità 1 Juniferità	- <del>2</del> ?	1 5 3	1355	443		597
IA C	ន	Vary Tery Results	Billisme.	Hote of the hote o	3 7	1 2 3		11.0	1 5 5 7 F	1.2.0
IBOD	2	Ĩ,		Auth Na )		1	23.4	4 5 3	5 E C	1 5 5 5
CAN	Σ.	1		illantite tin 13 Linte til	=======================================	H 25	163	17.1 17.3 17.3 10.4	17.0	1388
RESULTS FOR TIRUPPUR CAMBODIA COTTON.	اء	ı	77.	(with distance	'	5 2	7 5 2	\$ £ £	2.5.8	2 E E
CIRUI	Ξ			(en) A state")	गुड भूग	178	2 4 6	2: :	5.2.4.4	1
OR 1	2	}		ւրայ չ ։ 1 տա <u>ր</u>	£ 5	£ 8	1 1 1 7 1	20 CE 20 CE	19.12 19.12 19.14	1.2.2.1
TS F	=	. U. W.		nanii		2 2	2.9	8 5 2	755	5 5 E
ESUI	=	Prous Pertices un-	16.31	ll ,terge oll able	. e.7g	1 2 2 2		0.50 8.70 8.70 8.70 8.70 8.70 8.70 8.70 8.7	3 8 8	10 12:0 10 12:0 10:10:0
<u> </u>	=	Red Pre	,len	de selloll, luon l	2 2	4 5	E # 3	E 2 E	255	315
Table 15 (a).—SPINNING TEST	=	-	14I	f in the ibalical point of the finite of the		2 R	= a =	។ ដូ ភ	# ° !:	2 : 1:
NNIN	2			† sect latal	14.1	<u> </u>	<u> </u>	7 9	6,53	1.61
SPI	اء	Waste Percentabls.		.eso.l galaniga	9 0	2:	÷ : :	ë : :	£ : :	3 : :
<u>a</u>		nie Pen		Mod mooli bia')	10 5 t	6.2.	::::	1 : :	70,7 	2 : :
15 (	-	T,M		real mood wold	6.0	: :	5::	e1 & ; ;	g: : :	,; ; ;
able	۰	1	( sqt) a	lqınak 10 sıtalə //	æ	2	2	ē	2	£ 3
H	۵ ا			Counts Nonulnal.	5 S	5, 8	ត ត ត	ន្តន	ន្តន	នួកនុ
	7		To of a	Spinning.	11-6-31	29-1-93 25-5-8	16-7-31	26-6-33 26-6-33	17-1-34	1 - 1 - 3 - 1
	3			restson.	10:20-31	1012-11	1913-34 1913-34	1031-33 1931-33	1935-76 1935-36 1933-36	137-34
	61			Cotton	Cambodia Cambodia	Cambodia Cambodia	Cambolla Cambolla Cambolla	Cambodia Cambodia Cambodia	Cambodia Cambodia	Cambodia Cambodia
	1			No.		7	2277 Can	2753 Car 2733 Car 2733 Car	3269 Car	1075 Ca
	Į	Ì	Š	7	7.01 7.01 ·	1718	티워티	8 8 8	8 8 8	7 7 7

\* Doministic of the first flow is for a reall stable. It is to the rest of the rest of the first flow in the rest of the rest in the rest of the rest in the rest of the rest in the rest

### 15 (b).—TIRUPPUR CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	. Colton.	Place.	Season.
2373	Cambodia	Tiruppur	1933-34
2745	Cambodia	Tiruppur	1934-35
3149	Cambodia	Tiruppur	1935-36
. 3684	Cambodia	Tiruppur	1936-37
4021	Cambodia	Tiruppur	1937-38

### I.—Spinning Tests.

### 1. Treatment :--

- (a) Blow-room.—1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
  - 1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

### (a) Cotton:-

					Tı	RUPTUR CAMBODIA	•	
•	<del></del>			1933-31.	1931–35,	1935-36.	1936-37.	1937–38.
Colour				Creamy-white ; bright.	White to creamy- white; brightish,			Creamy-white.
Cleanliness	••	••	••	Clean : somewhat	Clean with occa-   sional stains.	Clean	Fairly clean; a little stained.	Clean.
Feel	••			Good smooth	Good smooth	Good smooth	Soft	Soft.
Ginning and r	schline	*Kg	••	Slightly knotted.	Fairly well-ginned	Fairly well-ginned	Woll-ginned	Woll-ginned.
Boods								**
Card Sliver			••	Clean and soft	Clean	Clean	Clean	Soft ; fairly clear
Card Web	••	••		Cloudy and neppy	Slightly neppy and uneven.	Slightly noppy	Vory neppy; cloudy.	A triffe noppy.
Weight of 10	Ant str	iрз	••	24.7 grams	29·7 grams	20·3 grams	37-4 grams	19-8 grams.
Remarks	••		••				Abnormally heavy strips.	

### (b) Yarn :---

			;		1	LINUPPUR CAMBODIA		
V*:.	<del></del>		•	. 1933-34,	1934-35.	1935-36.	1936-37.	1937-38.
Cleanlinger	···		••	Almost clean	Almost clean	A little leafy	A little leafy	Fairly clean.
Evenness		••	••	Even in the two lower counts.	Fairly oven	Fairly even	Fairly even	Evon.
Noppiness	••			Noppy	Керру	Neppy	Very noppy	A little neppy.
Slubbinosa	••		••	Slubby	A little slubby	·  · <u>·</u>		

<sup>3.</sup> Spinning Test Details and Results: - See Table 15 (b) on Fige 127.

II.-GRADER'S REPORT\* FOR TIRUPPUR CAMBODIA.

										TIRCITCE CAMBODER.	SIBODEA	,		1		
			•	1033-34.	ي.		1934-35.	<b>13</b>		1935-36.	.0		1036-37.	<u> </u>		1937-39.
Contract valued under	:	:	:	Broach		-: -:	July/Aug. Broach	ich		Broach April/May	[hy	;	July/Aug. Broach	   		Breach April, May.
Class	•	:	:	Fully good	:	·· Tino	ine :	:	Fine	ine	:	;	Fine	:	:	Burely Fine.
Colour	•	:	<u></u>	Creamy	:	<u>:</u>	Creamy-white	:	:	Creamy-white	:	;	Creamy-white	:		Creamy.
Staple Length	•	:	:	31/32 inch	:		31/32 inch	:		15/16 inch	:	:	15/16 inch	:		15, 16 inch.
Staple Strength	•	:	:	Good	:	Very (	ery Good	;	<del>:</del>	Good	:	;	Good	;	; ;	Good.
Regularity	•	:	<u> </u>	Good	:	Good	ood	:	<del>-</del> :	Regulat	:	:	Regular	:	7	Regular
Value above or below contract rate	tract n		:	B2. 60 on	:	Rs. 80	я. 80 он	:	:	Rs. 65 on	:	- :	Rt. 75 on	:	:	R4. 72 on.
Basis	•	;	;	Rs. 203 July/Aug. Broach   Rs. 232	ng. Broach	<u> </u>	1. 232	:		RA. 203	:	:	Rs. 225	:	:	157.
Date of Valuation	•	:	:	9-7-34	:	3-7-35	7-35	:	<u> </u>	20-4-36	:	:	28-6-37	:	:	7-1-34.
Remarks	•	:	:	:			:			:			;			:

\* The reports for 1933-31 and 1935-36 onwards are compiled by the mill supplying the sample.

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Table 15 (b).—SPINNING TEST RESULTS FOR TIRUPPUR CAMBODIA.

	DITY:		Testing Room.	:2	62	87	8	80	80	티	Ģ	61	7.0	80 63	82	83	69	83	
	HOUIDITY (%).		Spluning Room.	7.0	2	22	88	6	63	67	99	99	Ę.	55	11	٤	89	8	
	ATURE.		Spinning Room.	98	18	28	00	69	90	80	S3	88	123	87	87	16	93	16	
			.daal tog earuT Juutol.	17.0	18.7	8.0.8	17.3	10.0	£.	17.1	10.1	5.1	17.2	18.8	20.7	16.9	18.0	20.7	
:			Zobs ber kurd.	8.8	e: ::	3.5	6]	6.0	61	::	.:	;;	63.00	61.	7.0	1.8	1.5	1.5	
.			L'yenness class.		-	ıs		+4	13	6		13	-		ıs	6	<sub>10</sub>	<del></del>	
	cets.		Count-Work Product.	2170	2530	2126	2003	2012	1010	1001	2802	2703	2639	2570	2639	2562	2555	2010	
	Yarn Tret Results	BAT LITTIC.	orniquist de Riordi (Adi-diml)	123.8	101.6	9 0s	2 221	113 2	8.00	117.0	113.0	93.1	130.0	103.8	0.10	125.6	100.8	83.1	
:	YARN	a	Conuts Actual.	20.0	6.	1.02	21.3	23.0	30.0	10 8	8.1	0.03	20.3	23.7	20.0	20. 4	eş eş	31.3	
2			Count-Strength Product.	1073	1011	1133	1703	1691	1200	1793	1689	1556	1810	1690	1610	1709	1690	1403	
		Lr.	(.भवी) वीग्रह्मकराहि	85.6	63.3	0 62	50 3	70.2	/- 61 22	89 0	1.69	52.2	90.5	77	61	97.0	8.02	10.0	
7.0			Counts Actual.	10.01	6:13	er 51	: ::	1.1	39.6	50.0	£-:	8.62	20.0	33.7	29.7	20.2	24.0	30.2	
		<u></u>	ritoni vog envil.	76:11	19.73	21.80	17.09	19.73	21.86	17.93	19.73	21.80	17.03	19.73	21.86	17.08	19.73	21.80	
	°2.184.	 	Deste.	1 1 2		5.76	6. 10	5.55	10.0	0.07	5.55	6.50	5.03	3.01	6.97	0.10	5.01	7.03	
:	E PLETICULIES.		.4.B ,lrade albaiqe	- 00-e	900	0096	0050	20-0	9400	9200	9550	0000	10200	10200	0010	10000	10250	9930	
<u>.</u>	RIVG FRATE	400	Front Roller Spo IL P. M.	00%	179	<u>8</u>	761	182	100	161	121		210	193	160	213	101	173	1 2 2
=	ä	310	Yara Mershall var. 1 + 4lmle + 001 100d			ន	8		<u>=</u>	9	18	۲.	16	יי	9	0			Tilomotor of ri
2	-  ;		fa of hier	1 21	:	:	20.9	:	;	=	:	:	21:2	:	:	14.2	:		
3	Waste Percentian		Figure Love	6.3	:	:	1.0	:	:	0.3	:	:	6.	:	:	0.3	:	:	t rollor
v,	te Per	-	deal Room Lard	12.5	:	:	11.0	:	:	0.7	:	:	19.3	:	:	6	:	:	Diameter of ring frame front
١-	¥,		nlow Room to a	6.0	:	:	0.7	:	:	10	;	:	5.8	:	:	0.5	:	:	clos fee
9	-	adl	Actifut of Sample,	2			10			2			2			ដ			oter of
• >		<u></u>	Jentinol chanol	ន	ξĨ	င္ပ	65	či	စ္ပ	ន	<b>#</b>	8	ន	<b>5</b> 1	30	ន	7,	8	* Diam
	-		Date of splinites.	9-7-31	10-7-01	10-7-34	13-6-35	15-6-33	15-6-35	17-4-36	20-1-30	21-4-36	3-7-37	3-7-37	3-7-37	23-4-38	23-4-38	25-4-38	İ
es	-		Sea on a.	1933-31	1037-31	1632-34	1931-33	1931-33	1031-35	1935-36	1935-26	1935-36	1936-37	1930-37	1930-37	1037-33	1937-38	1937-33	
¢I	-	<del></del>	Cotton.	Tiruppur	Tiruppur Cambodia.	Tiruppur Cambodia.	Tiruppur Cambodia.	Tirappur. Cambodia.	Tiruppur Cambodia.	Timppur Cambodi t.	Tiruppur Cambodía	Tiruppur Cambodia.	Tiruppur Cambodia.	Tiruppur Cambodia	Tiruppur Cambodia.	Tiruppur Cambodía.	Tiruppur Cambodla.	Tiruppur Cambodia.	
-	-		Sample C	2373 ITE	23.3 C. T.	2373 Ti	2745 TI	2745	- SF 20-	9149	I GF1E	3149	3084	3634	3034	14021	1051	1031	
	1		a,	1 *"	••	•	1			I			•		·	£, "	ا آيڙ	1	

• Diameter of ring frame front roller—i. Diractor of rings—11...

1 It is to be noted that the total loss is for a small «ample weighing 10 lbs; for bulk sample spin under mill conditions it would be less than shown here,

### 16.—HUBLI KUMPTA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' elation, Bombay, who have very kindly agreed to arrange for the supply each season imples of the first arrivals of the new crop.

nple			Weight	1	Sample			Weight
о.	Cotton.	Season.	(lbs.)	ļ	No.	Cotton.	Season.	(lbs.)
20	Hubli Kumpta	1930-31	12	1	2692	Hubli Kumpta	1934-35	11
32	••	1931-32	12	į	3160	••	1935-36	11
42	**	1932-33	12	1	3573	,,	1930-37	11
29	**	1933-34	11	1	4013	41	1937-38	11

I.—Spinning Tests.

### Treatment :-

- (a) Blow-room.—Upto 1934-35:—Porcupine, Crighton (twice). Hopper, Scutcher (3 times).
  - 1935-36 onwards:—Hopper bale opener. Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
  - 1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### Spinning Master's Report :-

(a) Colton:-

1030-31.	· ·	~~~					
l	1931-32.	1932-33	1933-31.	1931-35,	1935-36,	1936-37.	1037-34.
Creamy-white.	Dullish ercamy- white.	% hite to creamy-white,	Duill-h-white tocreamy-white.	White to cream) -white.	White to cramy-white.	Creamy-white to white.	White,
Siightiv stained, leafy.		Dull; lenfy	Lesfy (finelesf)	Ledy	Lesty	Fairly leady	Very leafy.
Good	<b>.</b> .	Good	Good	Good	Good	Fairly good	Fair.
Well-ginned	Somewhat knotted.	l'alriv well ginned.	Well-ginned	Well-ginned	Fairly well- ginned.	Well ginned	l'air.
	0.8% glaned and unginned besides unde- veloped seeds.					••	••
Patrly clean	A little leafy	Almost clean	Clean	Clean	Almost clean	Ciran	A little leafy.
Good	Good	Good	Even; neppy.	Good	Good	Good	Good.
10.7 granıs	14.7 grams	13.0 grams	14.7 grams	13.1 gmma	11.6 grams	12.5 grains	19.3 grams.
Fully presied.				••			••
	Slightly stained, leafy.  Good	Well-ginned So mew hat knotted.  O.8". ginned and unginned besides under veloped seeds.  Catrly clean A little leafy Good Good 11.7 grams	white. creamy-white.  Slightly stained, leafy.  Good	white. creamy-white, to creamy-white, leafy.  Silghtly stained, leafy. Dull; leafy. Leafy (fine leaf)  Good	white. Creamy-white, tocreamy-white. Creamy-white. Creamy-	white. creamy-white to creamy-white. creamy-	white.

### (b) Yarn :---

						Hopli Rox	PT1.			
			1930-31.	1931-32.	1032-33.	1933-34.	1931-35.	1935–36.	1930-37.	1937-39.
line-s	••	••	Clean	Almost clean	Clean	Almost clean	Ciran	Clean	A little leafy	Fairly clean.
ness	••	••	Even	Eten	l'airly oven	Even	Fairly even	Eten	Even	Even.
ness	••	••	Practically nep- free.	Nep-free	Free of nep	Practically nep- free.	Almost free of nop.	Almost free of nep.	Almost free of nep.	Almost free o
Iness	••		٠.						••	
rks	••	••		••		٠. ر	•-	.,	••	

# II.—GRADER'S REPORT \* FOR HUBLI KUMPTA COTTON.

***************************************				s			Here Kenta.	towa.			•
				15:0:01	1931-32.	1938-33,	1933.31.	1031-35.	1035-36.	1036-37,	1037-38.
Centract valued under	:	; :	! :	Kumpta.	Brosch Kumpta.	F.G.M.G. Beaul	F.C.M.O. Bose b.	F.G.M.G. Branch.	F.G.M.G. Broach April/May.	F.G.M.G. Broach April/May 1937.	F.G.M.G. Broach April/May 1938.
Class	:	:	:	Fully grad.	Fully great.	l'uly (teal,	Fully good,	Strict fully good.	Fully good.	Fully good.	Good to fully good.
Colour	:	:	:	Slight tings.	Slight cream.	Browni dewhite,	Brownish white,	Rich Bawnish white.	Whitish brown.	Whitish brown.	Dull white.
Staple Length	:	:	:	13, 16".	29/72".	.5/2	2/2	20, 32".	3/17.	20/32*	29/32.
Stap's Strength	:	:	:	Fnir.	Fair.	Fair.	Fair.	Good.	Poor,	Good.	Good.
Regularity	:	:	:	Fair.	Fair.	Regular.	Regular.	Regular.	Irregular.	Good.	Good.
Value above or below contract rate	ontrac	opus 1	:	Paus.	R. 30 .n.	Rt. 22 on.	Rs. 30 on.	Re. 60 to Re. 65	Rs. 30 above.	Rs. 25 above.	Rs. 45 above.
Basis	;	:		R4. 250.	184, 166.	Rr. 177.	Rs, 195,	184. 245.	R4. 200.	Rs. 250.	Rs. 167,
Date of Valuation	:	:		15-1-31.	16.5.32.	18-1-33.	9.1.31.	6.3.35.	29.1.36.	64.37.	6-1-38.
Remarks	:	:	:	•	# \$	:	•	;	•	•	:
										"	

\* Report since 1933.71 is made by the mill supplying the sample,

Part   Part	Ħ	et	es	<b>~</b>	10	۰	,		٥	2	=	2		=	2	<u> </u>		2	۽	ន	ត	8	3	<b>11</b>	8		5
The late   County							WAS	TC PED	CKNTAGE			-	IE PURT	CULAR		,			YAT	Trak a	Lycles.				ATURE ATURE (°F.)		HELATIVE HEMIDITY (°,).
Trials   Kumpia, 1915-15, 19						.sdI ,		_	-		Der ber	'pose	.16.				LEI.	.1	- <del>-</del>	DALLES	ë i						_
	No.			Date of Spinning.	Counts Rominal.	olgung to tanple?	Blow Room Loss.	Card Room Loss.	Moa galanige		100 spindles hour,	Trink Roller St	splade speed, ILP	l)rall,	Turns per facts.	Jentof. Manco	( adi) dignorik	Count-Strength Produce		Work of Ruplure	Connt.Work	Product, Lisenbers class,	N. pa per 3 and.	Turns per inch.	spinning Room.	omooli Lalaniqë	Twing Room.
	1000	Trubil Kumnta	1930-31	l	81	2	11.0	8.8	<b> </b>	10.0	2	100	0020	6.19	17.04	19.5	84.5		<u>.</u>	117	2305	- 3	1.7	17.1	_	<b>3</b>	
	1020		1030-31		ត		:	:	:	;	2	180	0020	5.41	10.73		6.0				2339		ei ei	19.0	69	2	3
Hold Kumpla, 1931-28   11-5-72   24   11.1   8.4   0.6   21.0   65   126   255   17.05   50.4   65.5   17.05   50.4   65.5   17.05   50.4   65.5   17.05   50.4   65.5   17.05   50.4   65.5   17.05	1020		1030-31		8		:	:	:	:	8	191	0020	7.30	23.11	3	6.6		¦	) 	1912	-7		ŝi	æ	8	6
	1332	Hubli Kumpta.	!	11-5-32	8	å	14.1	8.6		21.9	23	180	0000	5,83	17.03				19.0	_	1011		0.8	123	 E	15	8
1322   Habli Kumpla,   1932-53   224-53   21   10   12.3   8.7   0.4   20.5   7.3   17.3   21.7   20.1   10.1   20.1   10.2   20.2	1332	Kubli Kumpta.		19-5-33	ä		:	:	:	;	99	E	0010	5.63	10.73		S		5:	-	131	<i>m</i>	7.0	19.0	£	8	€ 
Table   Tabl	1332	Habli Kumpfa	1031-32	12-5-32	8		:	:	:	:	<b>\$</b>	130	5030	7.14	: ::				39.1	-	1262		:	<u> </u>	8	60	- 67
The color of the	1743	Hubli Kumpta.	1032-83	23-4-33	5	2	. ei	18	{ <del></del> -	20.5	15	22	9350	6.67	10.73	<u> </u>	20.62	}	3.	93.		-	8.6	19.3	5	8	3
2229         Hubli Kumpla, 1933-34         134-43         24         10-4         34         11-4         34         11-4         34         15-6         5-70         5-70         5-70         5-70         5-70         5-70         17-70         11-3         21-70         11-4         34         34	1742	Rubli Kampts.	1032-33	21-1-33	8		:	:	;	:	o:	133	ş	1.36	: ::	8	.e.		- <del>1</del> 2.		. 2236	**	**	<del></del>		63	٤ 
Participal   Franchista   1938-31   14-4-34   24	0000	Habll Kumpta	1033-34	13-4-34	ន	10	12	7.6	¦	7.0	= =	153	020	5.81	17.03	3.0	13	1 2	3.6	11	125		-:	17.3	7	5	P
String   S	Cicci	Hubli Kumpta.	1033-31	14-1-31			;	:	;	:	 a	170	0010	5,70	10.73	21.0	0.1.0		21.3	or	E403		1.0	19.1	ţ	90	3
Hubil Kumpta, 1934-35   11-3-35   20   10   11.1   7.7   0.3   19.2   10   103   200   0.0   0.0   17.3   24.1   177.1   173		Bubll Kumbta.	1033-34	16-4-34	8		:	:	:	:		150	0300	7.14	ี ส์	e.	. <del>13</del> .8		<u>و</u>		2632	•3	:	5.5	<u>,</u>	6	8
Tubil Kumpta, 1935-36   12-3-35   24   .	2002	Undil Kampta.	1034-35	11-3-33	8	10	11.1	7.7	٠	19.3	2	103	9300	6.10	17.04		96.0		20.5	121.	1,00		1:0	12	<del>آة</del>	8	3
Hubli Kumpta, 1935-36   27-4-36   29   20   2.	2002	Hubli Kumpta.	1034-35	12-3-35	ä		:	:	:	:	-	163	10250	41.53	19.73		17.1		24.3		5.		1:0	15.0		ģ	<b>*</b>
	2892	Hubli Kumpta.	1934-35	12-3-35	e e		:	:		:	-	161	10200	6.92	:: ::	30.5	1 26.3		30.0	-9.	: 	•3		E.	ī.	5	\$ 
Hubli Kumpta, 1935-36         284-76         21	3100	Habli Kumpta.	1033-36	27-f-36	នួ	e	0.0	7.3		10.7	<u> </u>	102	0010	6,10	17.09				20.0	<b>-</b> 	15		-	1	5	8	1 62
Hubli Kumpta, 1036-37         104-17         20         4.71         23,20         6.71         23,20	3160	Hubii Kumpta.	1935-36	28-4-36	100	_	:	<b>":</b>	:	<u> </u>	=	176	0000	5.43	10.73		51.0		3.6				7.5	19.0	F. F.	\$	_ F
Hubli Kumpta.         1036-37         10-4-37         20         10.0         8.2         0.4         19.4         21         200         10150         5.01         17.04         20.2         E9.3         1501         20.1         121.1           Hubli Kumpta.         1936-37         10-4-37         20         10.4         20         10.73         24.0         71.8         1773         21.1         105.0           Hubli Kumpta.         1937-38         21-4-38         20         10         12.0         7.7         0.1         19.1         21         20.5         21.8         20.5         51.0         1504         20.1         1504         20.6         51.0         1504         20.1         150.0         54.2           Hubli Kumpta.         1937-38         22-4-38         20         10         12.0         7.7         0.1         19.1         21         20.3         67.7         1730         20.4         120.8         30.3         20.3         67.7         1730         20.4         120.8         30.4         10.10         30.4         120.8         30.2         40.8         10.10         30.2         40.8         40.8         40.8         40.8         40.8         40.8 <td>3160</td> <td>Kubil Kumpta.</td> <td>1933-36</td> <td>28-4-36</td> <td>99</td> <td></td> <td>:</td> <td>:</td> <td>:</td> <td>:</td> <td>12</td> <td>ន្ទ</td> <td>0006</td> <td>6.71</td> <td>23.24</td> <td></td> <td></td> <td></td> <td>5.</td> <td></td> <td></td> <td></td> <td>=======================================</td> <td></td> <td></td> <td>3</td> <td><u>۽</u></td>	3160	Kubil Kumpta.	1933-36	28-4-36	99		:	:	:	:	12	ន្ទ	0006	6.71	23.24				5.				=======================================			3	<u>۽</u>
Hubli Kumpta.         1037-38         21-4-37         20         12.0         5.20         10.73         24.0         71.8         1793         21.1         105.0           Hubli Kumpta.         1037-38         21-4-35         20         10         12.0         2.7         0.1         19.1         21         20.0         6.63         21.8         20.5         61.2         15.9         51.2         15.9         51.2         15.0         64.2           Hubli Kumpta.         1037-38         21-4-35         20         10         12.0         7.7         0.1         19.1         21         21.0         15.0         64.2         17.03         67.3         67.7         1770         20.4         120.6         67.0         5.01         120.8         16.9         20.4         120.8         16.9         20.4         120.8         16.9         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20.4         120.8         20	3573	Hubli Kumpta.	1036-37	10-4-37	20	20	11.0	8.0		10.4	-	i	10150	5.03	20.53	6.0	12.23	_	1 6	-	8		8		Ē	1 5	5
	3573	Hubli Kumpta.	1036-37	10-1-37	<u></u>		:	:	:	:	18		10200	5.20	10,73	0.45	71.8	-	1				-			3	
Hubli Kumpta, 1937-38 21-4-38 20 10 12.0 7.7 0.6 19.1 21 212 10200 6.03 17.03 20.3 87.7 1730 20.4 120.8 Rubli Kumpta, 1937-38 22-4-39 21 18 106 10200 5.01 10.73 21.2 60.8 1639 21.2 104.0 21.2 104.0	3573	Isabii Kumpta.	1936-37	17-4-37	8		:	:	:	:	ឌ		0090	6.63	21.88	į.	2.0		ន				:			; <b>&amp;</b>	. Z
Hubli Kumpta, 1937-38 22-4-39 21 18 104 10200 5.01 10.73 21.2 60.8 1630 24.2 104.0	4013	Hubli Kumpta.	1037-38	21-4-38	8	2	0::	7.7	1	19.1	- -	딅	10200	6.03	17.03	20.3	87.7	-   -	20.4	-	188		- 6	-   2	+	1	- -
Hubli Kumnia, 1932-38 29, 194 30	4013	Hubll Kumpta.	1937-38	22-1-38	ĕ		:	:	:	 ;	81	101	10200	5,61	10.73	_	80.8		4			-	-		- F	2	
101 111 111 111 11 11 11 11 11 11 11 11	4013	Hubli Kumpta.	1037-38	22-1-38	8	_	:	:	:	:	ន	171	10000	7.03	21.60				3				6.0	_	_	: :	2

• Diameter of ting frame front roller—1. Diameter of ring—11. † Idea of the sample spun under mill on tilling it would be fest than shown here.

### 17.—HUBLI UPLAND COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample	Cotton.	Season.	Weight	Sample	Cotton.	Season.	Weight
No.			(lbs.)	No.			(lbs.)
	Hubli Upland	1930-31	12	2230	Hubli Upland	1933-34	`11
1333	"	1931-32	12	2763	,,	1934-35	11
1743	**	1932-33	12	3161	••	1935-36	11

### I.—SPINNING TESTS.

### 1. Treatment:-

- (a) Blow-room.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
  - 1934-35 and 1935-36:—Hopper bale opener, Horizontal eleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report :-

(a) Colton:-

					Hubli U	PLAND.		
			1930-31.	1931-32.	1932-33,	1933-31.	1934-35.	1935-30.
Colour	••	•••	Creamy-white; slightly bright.	Creamy-white,	White to creamy- white; fairly bright.	Creamy-white.	White to croamy.	Creamy-white.
Cleanliness			A little leafy.	Fairly leafy.	A little leafy.	A little leafy.	A little leafy.	Leafy.
Foel		••	Good softish.	Softish.	Good.	Poorish soft.	Good.	Softish.
Ginning and	Neppi	ness.	Knotted due to ginning.	A good deal knotted.	Nopped and knotted.	Well-ginned.	Somewhat knotted.	Somowhat knotted in ginning.
Souds	••	••		A few undeve- loped besides 0.9% partly ginned and	••	••	**	••
Card Sliver			Clean.	elenn seeds. Fairly clean.	Almost clean.	Clenn.	Clean.	Almost clean.
Card Web		••	A trifle neppy and cloudy.	Good.	A little neppy.	Cloudy.	Somowhat noppy.	Somewhat neppy.
Weight of 10	) flat s	tripa.	18·3 grams.	18•5 gmms.	20-9 grams.	19.0 grama.	31 · 3 grams.	15·8 grams.
Remarks			Fully pressed.	••				••
	(b)	Yar	n :					
•					Huna U	ITAND.		
			1930-31.	1931-32.	1932-33.	1003-31.	1934-35.	1935-36.
Cleanliness		••	Fairly clean.	Fairly clonn.	Clean.	Clean.	A little lenfy.	Almost clean.
Evenness			Even.	Fairly even.	Fairly even.	Fairly ovon.	Fairly oven.	Fairly even.
Noppiness		••	Almost non-free	Almost nop-free		Almost free of non.	Noppy.	Almost free of nop.
Slubbiness	••			] · :	nep. A trifle slubby.			**
Remarks	••	•	,,					

<sup>3.</sup> Spinning Test Details and Results:—See Table 17 on page 133.

II.—GRADER'S REPORT\* FOR HUBLI UPLAND COTTON.

			Ηαυτ	Новы Органо.		
1	1930-31.	1931-32.	1932-33.	1933-31,	1934-35,	1935-36,
ontrace valued under	Kumpte.	Broach Kumpta,	F. G. M. G. Broach,	F. G. M. G. Broach.	F. G. M. G. Broach July/Aug. F. G. M. G. Broach.	F. G. M. G. Broach.
Jass	. Fully good.	Better fully good.	Fino.	Fino.	Baroly fine,	Fully good to fino.
Jolour	Slight tingo.	White.	White.	Dull white.	Puro whito.	Dull white.
Staple Longth	7/8".	1/8".	13/16".	3/1°.	27/32* to 28/32*.	Baroly 3/4".
Staplo Strength	. Fair.	Poor.	Weak.	Weak.	Fairly strong.	Weak.
Regularity	. Fair,	Fair,	Rathor irrogular.	Rathor irrogular.	Foirly wgular.	Fairly regular.
Value abovo or below contract rate	Rs. 10 off.	Rs. 25 on.	Rs. 7 on.	Bs. 20 on.	Rs. 60 on.	Par to Rs. 5 on.
Basis	Rs. 250.	Rs. 166.	Rs. 177.	R9. 195.	Rs. 228.	Rs. 200.
Date of Valuation	. 16-4-31.	16.5-32,	18.4.33.	9-1-31.	20-6-35,	29-4-36,
Remarks	:	:	:	:	:	:

\* Report since 1933-34 is made by the mill supplying the sample.

Table 17.—SPINNING TEST RESULTS FOR HUBLI UPLAND COTTON.

75	TY:		Testing Room.	ı,	2	29	29	29	8	69	8	88	ge	28	٤	Z	8
28	Relativi Humidity (%).		Spinning Room.	79	잃	99	49	\$	2	62	67	69	20	73	8	8	29
35	Tempen- Ature (°F.)		spinning Room.	87	89	88	88	68	98	87	88	87	88	88	88	84	88
25		rnoj-	Turns per Inch. Ac	17.0	18.9	22.1	17.4	19.1	17.4	19.0	17.3	18.0	17.2	20.3	17.2	18.9	22.2
23			Neps per yard.	1.2	61 63	2.7	1.5	1.2	1.8	1.2	1.5	1.5	e 61	4.0	1.0	1.5	1:2
22	j		Lyenness Class.	<b>e</b>	4	13	- <del>1</del>	*	4	כי	*	10	4	10	7	4	-
27	iles.		Count-Work.	2012	2394	2403	2251	2215	2249	2280	2293	2265	2488	2150	2470	2398	2402
ន	Test Resulus	Barristio,	Work of Rupture	123.2	105.0	82.0	112.0	90.4	113.0	94.6	115.8	0.76	127.6	105.6	126.0	101.2	97.0
19	YARN 7	-	Counts Actual.	19.6	22.8	20.3	20.1	24.5	19.0	24.1	10.8	24.1	10.5	23.2	10.6	23.7.	20.1
18			Count-Strength Product.	1504	1431	1293	1188	1147	1355	1295	1237	1001	1249	1225	1339	1228	1210
17		LEA.	Strength (lbs.)	75 2	0.10	42.8	58.8	48.8	1.89	54.4	62.8	44.2	64.4	51.7	66.0	51.8	40.0
16			Counts Actual.	20.0	23.3	30.2	20.2	23.5	19 0	23.8	19.7	24.0	19.4	23.7	20.1	23.7	29.8
15			Turns per inch.	17.98	19.73	23.11	17.98	19.73	17.08	10.73	17.98	19.73	17.98	20.74	17.98	19.73	23.26
Ħ	Particulars.*		Drate	6.67	5.68	7.30	5.95	5.68	5.98	5.98	5.83	5.98	5.81	6.22	6.07	5.01	6.80
13	NE PARTI	ж.	Spindle Speed, R. F	9200	9200	0026	9200	0300	0350	9400	0200	9100	8750	8900	9550	0006	9550
13	RING FRA	'poad	Front Roller Si	196	180	101	186	173	188	173	180	170	180	166	195	175	149
11	4	00T	Yatn Breakages per spindles per hour.	01	ខ្ល	57	17	22	89	10	88	161	47	89	16	41	92
2	ES.		Total Loss.†	18.8	:	:	20.6	:	20.6	:	17.0	:	23.1	:	17.5	·:	:
a	BNTAG		Splnning Loss.	0.7	:	:	0.0	:	0.5	:	0.5	:	0.0	:	9.4	:	$\overline{\cdot}$
80	Waste Percentages		Catd Room Loss.	19.1	:	:	10.2	:	11.3	:	10.8	:	15.3	:	8.7	:	:
4	WAS	-	Blow Room Loss.	9.1	:	:	11.1	:	10.0	:	63	:	8.8	:	9.3	:	:
g		(.ed	I) olgmas to tagis W	81			2		Ħ	- -	g		9		22		
ē.			Counts Nominal.	02	57	င္ထ	ន	ei.	8	77	ន	72	8	72	8	72	8
→		,	Date of Spinning.	10-4-91	11-4-11	11-4-31	11-5-33	12-5-32	24-4-33	24-1-33	13-4-34	14-4-34	26-6-35	27-0-35	30-4-36	29-4-30	29-4-36
60	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Scason.	1930-31		1030-31	1	1931-32	1932-33	1032-33	1933-34	1933-34	103 <u>1-</u> 35	1034-35	1935-30	1935-36	1935-36
· ·,		•	Cotton.	Hubll Upland	Hubli Upland 1930-31	Hubli Upland	Hubii Upland 1931-32	Hubil Upland	Hubii Upland 1932-33	Hubli Upland	Hubli Upland 1933-34	Hubil Upland 1933–34	Hubli Upland 1934-35	Hubii Upland	Hubli Upland	Hubli Upland 1935-36	Hubli Opland 1935–36
-			Sample No.	1021	1021	1021	1333	1333	1743	1743	2230	2230	2763	2763	3161	3161	3161

\* Diameter of ring frame front roller—#". Diameter of rings—1#". † It is to de noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

### 18.-KAMPALA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
2754	Kampala (African)	1934-35
3266	Kampala ( ,, )	1935-36
3578	Kampala ( " )	1936-37
4034	Kampala ( " )	1937-38

### I.—Spinning Tests.

### 1. Treatment.-

- (a) Blow-room:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice). In 1934-35, the sample was not passed through Horizontal cleaner and was passed through the Scutcher three times; otherwise its treatment was the same as for the other samples.
- (b) Card-room—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3.

### 2. Spinning Master's Report :---

(a) Cotton:-

					Kam	Pala.	
<b></b>				1934-35.	1935-36.	1936-37.	1937-38.
Colour				Whitetocreamy-white; bright.	White to creamy- white; bright.	White to creamy- white.	White to creamy- white.
Cleanliness	٠,		••	Very clean.	Very clean.	Clean.	Clean ; a little stained.
Feel				Good; silky.	Smooth and bodied.	Good; soft.	Soft; smooth.
Ginning and Ne	ppiness		••	Well-ginned.	Somewhat knotted and strung.	Well-ginned.	
Sceds		••				٠.	
Card sliver	••			Clean and silky.	Clean and silky.	Clean ; silky.	Clean; soft.
Card web				Even and nep-free.	Good.	Good.	Almost free of neps.
Weight of 10 fl	at strips			22 · 5 grams.	21 · 8 grams.	  17•1 grams.	13·1 grams.
Romarks	••	••	••	••			,
				1	1	ļ	,

### (b) Yarn :--

ţ

					KAM	PALA.	
				1934-35.	1935-35.	1936-37.	1937-38.
•					<del>'</del> -	{	!
Cleanliness	٠,		••	Clean,	Clean,	Clean.	Clean.
Evenness	••	••	٠.	Even.	Even,	Even.	Even.
Neppiness		••		Somewhat neppy— small neps.	A little neppy.	Almost free of nep.	Free of nop.
Slubbiness			••				
				<u> </u>			

<sup>3.</sup> Spinning Test Details and Results:—See Table 18 on page 136.

## II.-GRADER'S REPORT FOR KAMPALA COTTON.

		Kampala.	ATA.	
	1934-35.	1935-36.	1936-37.	1937-38.
Contract valued under	Broach July/August 1935.	Broach.	Broach April/May 1937.	Broach April, May 1938.
Class	Good.	Fine but little stainy.	Fully good to fine.	Fully good to fine.
Colour	Creamy-white; silky.	White.	White creamy.	Greamy-white.
Staple Length	13.		14".	133.
Staple Strongth	Good.	Very good.	Good.	Good.
Regularity	Regular.	Regular.	Regular.	Regular.
Value above or below contract rate	Rs. 129 on.	Rs. 121 on.	Rs. 190 on.	Rs. 122 on.
Basis	Broach July/August 1935,	Broach July/August 1936,	Rs. 230.	Rs. 167-2-0.
Date of Valuation	:	16-7-36.	4-5-37.	3-5-38.
Romarks	:		:	:

,	63	r (%).		Testing Noom	, E	2	8 8	62	ĢĮ.	89	8	3 8	67	8	3 8	: 6
•	81	Relative Dire (9	-	Spinning Room.	ة -		*	12	27		g		6	6		. s
	19	ATURE 1		aplanlag Room.	88		88	28	87	88	   g	ė	8	6		
	<b>1</b>	<u> </u>	1	Turns per inch. Actual.	17.1	31.1	23.3	17.3	97.5	1: 15	9 9	0.05	. E.	"		23.0
	ដ		-	Reps per Tard	3.6	4.5	80.	r: ci	9.0	cı er	8.6			1 4		
	23		-	Evenness class,		<del>-</del>	٠,	6:			"			-		
	31	ž		Count-Work Froduct.	4,317	3,054	3,153	3,017	3,131	3,027	3.99	2,993	2,0,23	3.662	3,138	3,004
ron.	20	Yany Test Results	ISTIC.	Rupture (Inch-lbs.)	211.8	120.0	80.0	175.6	100.0	74.0	3.6			180.6		
RESULTS FOR KAMPALA COTTON.	10	Yany Tr	BALTIFTIC	Counts Actual	20.4	10.03	38.8	20.0	29.4	0.0	20.8	30.0	39.7	10.3		
ALA	18 1			Product.	2,260   20	2,078	1,821	100,5	1,953	01,709	2,138	C08,	1,519 30	2,161	_	
AMP,				digastic-Strength	110.8 2,	77.7	47.0 1,	0.101	1,		03.3	02.3	1,	106.6		
)R K	17		LEA	Strength (lbs.)		_		1			-			-		
S F(	10			Counts Actual	130.	33.	33.8	20.3	90 20.5	2	13.0	74 30.0	<u>ڇ</u>	45 20.3	21 20	11.3
SULI	13	•.		Turns per lach.	17.09	21.80	.: ::	17.03	21.86	25.23	16.85	20.74	23.70	5.	20.	27.70
RES	11	Particulars*		Draft,	5,81	6.11	8.15	6,10	6,54	8.80	0.25	0.03	8.83	0.31	9.51	8.07
TEST	13	BANE PAR	r.u.	A pleade Speed, R.	9,700	008'6	008'6	10,300	10,500	10,400	10,250	10,250	9,500	10,030	10,200	10,200
-	13	RING F	poed,	I'ront Roller B	190	166	171	102	163	136	325	183	<del></del>	SE	170	157
Table 18.—SPINNING	11		roq e	Yam Dreakage 100 spindles bour,	•		-	7.5	e	כו	•	2	c1	0	۰.	22
8.—S	10	YOES.		Total Loss.†	14.0	:	:	13.4	:	:	11.3	:	:	10.3	:	<u>:</u>
le 1	0	Waste Percentages.	 	Spinning Loss	 	:	:	61	:	:	°.	:	:	0	<u>:</u>	<u>:</u>
Lal	. 80	VASTE	*	Cond Room Los	11.7	:	:	11.1	:	:	10.2	<u>:</u>	:	1.7	:	
	~		.62	Djon Room Los	3 1	:	:	e! 65	:	:	*:	:	:	3.1	:	_
	ສ	('80	bje (jj	rned to SulploW	2			<u></u>			10			2		_
	, <sup>13</sup>			Counts Norman	8	<u></u> 25	<b>\$</b>	8	용	9	뭐	8	9	8	8 	=
	} 1 <sup>-1</sup>			Date of Spinning.	27-0-35	1-7-35	29-6-33	7-7-30	10-7-30	11-7-30	23-4-37	21-1-37	26-4-37	20-1-39	30-1-38	30-4-38
		<b>]</b>		<b>S</b> елвоп.	1931-35	1034-35	1934-35	1935-36	1035-36	1033-36	1020-37	1030-37	1030-37	1937-38	1037-38	1037-38
	1 <sup>01</sup>		<del></del>	Cotton.	Kampala	Kampala	Kampala	Kampala	Kampala .	Kampala	Kampala.	Kampala.	Kampala	Kampala.	Kampala	Kampala
				Sample No.	. 2754 K	2754 K	. 2754 K			3260 K			3578 K			4034 H

\* Diancter of ring frame front toller—1". Diameter of rings—11".
† It is to be noted that the fotal loss is for a small sample weighing 10 lbs. or thereabouts; for bulk sumple spun unter mill conditions it would be less than shown here.

### 19.—AFRICAN BUSOGA COTTON.

se samples have been tested by arrangement with the Bombay Millowners' Asa, Bombay, who have very kindly agreed to arrange for the supply each season es of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1749	African Busoga.	1932-33.
2755	African Busoga.	1934-35.
3267	African Busoga.	1935-36.
3579	African Busoga.	1936-37.
4036	African Busoga.	1937-38.

### I. SPINNING TESTS.

### reatment : —

ı)

Blow-room.—1932-33 Sample:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 onwards:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice). The 1934-35 sample was not passed thro' the Horizontal cleaner and was passed through the Scutcher three times; otherwise its treatment was the same as for the other samples.

Card-room.—1932-33:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 onwards:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. I possesses a band drive arrangement.

### oinning Master's Report :--

### ) Cotton :---

			Arr	ICAN BUSOGA.		
-		1932-33.	1934-35.	1935-36.	1936-37.	1037-38.
		White to creamy-white.	White to creamy-white; bright.	White to creamy-white; brightish.	White to creamy- white; bright.	White to creamy- white.
		Bright; very clean.	Clean.	Clean.	Fairly clean.	Clean.
		Soft allky.	Silky.	Soft silky.	Soft silky.	Soft.
ppine	SS	Well-ginned.	Somewhat knotted.	Slightly knotted in gin- ning.	Well-ginned.	Well-ginned.
		<b>.</b> .			••	
		Clean.	Clean	Clean.	Clean soft.	Clean.
		Good.	Tairly neppy.	Somewhat cloudy and neppy.	Fairly good ; a trifle neppy.	Good; nep-free.
at stri	ips	18.2 gram«	30.3 grams.	24.6 grams.		14.5 gram9
••	••	••	Card sliver has a poorish soft and silly feel.	Fibres are irregular in length.		

### Yarn:—

			AFRICAN BUSOGA.		
-	1932-33. ,	1934-35.	1935-36.	1936-37.	1937-38.
	Clean. Even. A trifle neppy.	Clean. Even. Neppy.	Clean. Even. Somewhat neppy. Occasionally slubby.	Clean. Even. Free of nep	Clean. Even. Free of nep.

pinning Test Details and Results.—See Table 19 on page 139.

## II.—GRADER'S REPORT FOR AFRICAN BUSOGA COTTON.

					•	African Buscea.		
	}			1032-33.		1935-36.	1936-37.	1937-38.
Contract valued under	E		:	F.G.M.G. Broach Hedge	Broach July/August 1935.	Broach.	Bronch,	Broach April/May 1938.
Class	:	:	:	Fully good.	Good.	Fine but little stainy.	Fine.	Fully good to fine.
Colour	•	:	:	Creamy-white.	White-oreamy.	Wlute.	White creamy.	Greamy-white.
Staple Length	:	:	:		14".		114	e pro-
Staple Strength	:	:	:	Very good.	Good.	Very good.	Good.	Good,
Regularity	:	:	:	Good.	Regular.	Very regular,	Regular.	Regular.
Value above or below contract rate	7 conti	net rot		Rs. 118 on.	Rs. 127 on.	Rs. 120 on.	Rs. 188 on.	Rs. 118 on.
Basis	:	;	:	F.G.M.G. Broach Contract	Broach July/August 1935.	Bronch July/Aug. 1936,	Broach A/May 1037,	Broach Rs. 157-2-0.
Date of Valuation	:	:	:	18-4-33.	;		Rs. 230.	3-5-38.
Remarks	•	•	:		;	:	•	:

	,	. ا	ان	!		1						ı						
	27	RELATIVE	orri (%	Testing Room.	12	8	22	ક્ર	<b>22</b>	8	7.	27	<b>&amp;</b>	90	8	28	8	<b>\$</b>
	ş	THE PER		пооя упппид	10	49	ជ	77	22	Ę	23	2	8	8	8	8	8	8
	Ęſ	FRMP1 R	Đ	mooM Yalaalq2	Ŧ	96	B	88	æ	<u>ځ</u>	98	65	2	8	8	91	10	8
	द		_	Lurns per inch Leturi	0 #7	28 8	17.1	ខ្ព	1 15	 	6 05	21.2	† 91	F 61	13 1	15.0	10 3	r- -
	13		_	Zeps per hard.			80 I.	8	17	1.8	~;	e1 20	\$ 0	80	0	: 0	9	æ
	ĉi		_	Evenness Class	د،	13	~		-	-	<b>→</b>	- 5	¢1	က	+	^1	~	4
rton	ត	SULF	۱	Count-Work	1861	2038	097+	8±12	65±	1798	7211	3272	1121	3165	1026	3786	3171	3217
(C)	20	A TEST RISULTS	BUITSTIC	orh of Rupture ( di don)	0 1/	50 0	300 7	123	80 1	11	109 8	\$1.2	Lo3 ×	105 6	70 U	172 4	105 0	5. 80
RESULTS FOR AFRICAN BUSOGA COTTON.	10	1		Counts letuil	) N	s	07	6 81	5 05	÷ 07	1- 61	808	6 02	0 00	10°	ري د	? @	2.
N BU	18			dignit Strength Product	1610	1508	- - -	2171	1873	2112	1,007	1507	STITE	2107	1758	2932	2010	1717
RICAI	=		181	Strength (lbs.)	77	20 00	119 2	7.	11.3	102 6	 g	=	101	<u>ۋ</u>	2 = 1	III 3	3	- - -
A AF	10			Counts letinil	39.1	9 0,	7 07	χ; χ	<u>\$</u>	90 G	원 6	20	202	<u>.</u>	e e	20 6	30 <del>4</del>	e 27
FOI	:			donl tog entuT	23.23	96 GE	17 %	31 82	ا ا	17 98	\$ ====================================	25 28	16 55	20 22	25	16 85	FL 07	53 TB
ULTS	#	911	PARTICI LARY	भारत	9.14	· =	<b>₹</b> 6 ′ 1	ر ص	9	5 97	0 41	3 03	6 19	0 02	8 33	6 22	40	8 67
	2			Spinile Spead,	1070	105011	9700	9700	080	10250	10300	10400	00101	10,200	970	10170	10700	10200
Table 19.—SPINNING TEST	1		NI T BUINT	Lront Roller Speed, R. P. M.	#	138 	197	184	=	307	13	146	- # 	<u>~</u>	17	- F	=======================================	157
ING	==	_		Yarn Breahages per 100 spindles per hour.	17	6]	<u>5</u>	1-	2	7.	<u> </u>	0	•	=	-	•	•	0
Z	10		. 6	t real lated	13.6		18 0		'	# et			13.2			=		
-SP	6		Prici atages.	.t-0 I nainaig2	7	Ì	÷			0 3			0			0 1		
19	•			Pro I moon I ore	20		11 2			14 1			10 1			80		
pie	t-		W UST	Blon Room Logs	7		3.4			٠,			e5 1.7			<u>-</u>		
<u>-</u>	ح		( ad	l) elqnır = to triglə //	2		유			2			91			2		
	ış			Counts Aountal	유	0,	27	<u>ಣ</u>	9	25	<u></u>	70	នុ	2	07	នុ	ຊ	0+
				Dito of Spluning	1-5-33	3 5 33	27-0-35	23-6-37	28-0-37	× 7-36	10-7-01	9-7-30	26 1 37	27 1-37	27-1-37	2-5-5	26-73 -7-38	4-5-18
	•			Seron	1032-33	1932-3,	1931-35	1931-37	1034-31	1935-36	1037-70	1935 36	1030-37			1937-3	1037-35	1937-39
	*1			Cotton	African	Duso,74 Africin Busoga	Iffem	Vincan	Uncora Uncan Busora	Vithean	Busoga African	Nergan African * Busoga	Vfrlean	Busogn. Uncan	African Bu-og.	African	Mrcan	Mroga Mrchu Biroga
	-			Sample	17.10	1740	27.55	12	2755	1975	3267	3267	37.0	3770	3570	9607	1036	9601

• Winstir et ing frame frant roller—?" Winstir of rugs—16" † It is to be noted that the total loss is for a small simple wighing 10 lbs , for bulk sample spun under mill conditious it would be less thin shown here

### 20.—JINJA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Samplę No.	Cotton.	Season.
3268	Jinja (African).	1935-36.
3580	Jinja (African).	1936-37.
4035	Jinja (African).	1937-38.

### I.—SPINNING TESTS.

### 1. Treatment: -

- (a) Blow-room.—Hopper bale opener, Horizontal cleaner, Crighton (once), Guidded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).
- (b) Card-room.—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3.
- 2. Spinning Master's Report.

(a) Coiton:

							Jinja (African).	
			_			1935-36.	1936-37.	1937-38.
Colour	••	.,		••		White to creamy-white; bright.	White to creamy-white; bright.	White to erenmy-white.
Cleanlines	3					Fairly clean.	Clean.	Clean.
Feel		••		••		Soft smooth.	Good saft.	Soft.
Ginning ar	ad Neg	piness		••		A good deal knotted in ginning.	Fair.	Woll ginned.
Seeds						••		
Jard sliver	••		••			Clean, soft and silky.	Soft silky.	Clean ; soft.
Card web	••			••		A little neppy and cloudy.	Fairly good ; nep free.	Good; nep free.
Weight of	10 fla	t strips				31-1 grams.	16·3 grams.	15.0 grams.
Remarks					••	••	Good cling.	'\'

### (b) Yarn:-

		_			Jinja (African).	
				1935-36,	1930-37.	1937-38.
Cleanlmess				 Clean.	Clean.	Almost clean.
Evenness				 Even.	Even.	Even.
Neppiness	.,		••	 Noppy.	Almost free of nep.	Free of nep.
Slubbiness	••		••	 A little slubby.		

<sup>3.</sup> Spinning Test Details and Results: -See Table 20 on page 142.

# II.—GRADER'S REPORT FOR JINJA (AFRICAN) COTTON.

		Jinja (African).	-
	1935-36.	1936-37.	1937-38.
Contract valued under	Broach.	Broach.	Broach April/May 1938.
Class	Fully good to fine.	Fully good to fine.	Fully good to fire,
Colour	White creamy.	Creamy.	Creamy.
Staple Length	1 1/32".	1 1/16".	11/16".
Staple Strength	Good.	Good.	Good.
Regularity	Regular.	Irregular,	Rather irregular.
Value abovo or below Contract rate	Rs. 110 on.	Bs, 185 on.	Rs. 110 on.
Basis	Broach July/August 1936, Rs. 240.	Broach April/May 1937, Rs. 230.	Broach Rs. 157-2-0,
Date of Valuation	15-7-36.	4.5.37.	3-5-38.
Romarks	:	:	:

		1	<b>.</b> :	1	İ			j	1						1
	7.7	ATIVE	Homidity (%).	•100	Testing Roo	20		22	5			22	3	\$ 	m here
	27		HARE	•tE0	Spi <del>nn</del> ing Ko	25	25	E.	29	8	8	8	8	8	than sho
	<b>13</b>	TEMPER	E	*0100	off galaniqe	\$	83	8¢	8	2	98	16	ੱਛ 	8	ld he les
	12			.fi30	Turns per l Actual.	17.1	9.05	21.1	16.3	10.0	6.55	16.3	19.7	a,	ne it won
	ន			.ltst.	Nebs bet 7	52	?!	4.0	1.0	.:	1.0	9.0	8.0	5.5	Il condition
	23		) )	. r84.I	Пу срисъя С	-	₩	13	<b>C1</b>	4	13	83	7	-	under m
ľon.	ត	LTS.		7	Count-Wor	3200	3251	3536	3007	3330	9250	87.58 85.78	3070	3181	uple spun
RESULTS FOR JINJA (AFRICAN) COTTON.	ន	YARY TESTITS	Ballistio.	amiqui	Work of I	172.0	108.0	10.0	191.0	118.0	80.0	185.8	103.0	7.	It is to be noted that the total love is for a small sample weighing 10 lbx.; for bulk sample spun under mill conditions it would be leve than shown here.
AN)	£	YIRY	Ã	.Sa.w.	Counts 1cl	ا- چ	30.1	40.0	- G	8,51	10.4	20.1	8. 8.	41.1	10 lbs.; fa
FRIC	ے		! ]	ម្មវិធីប	Count-Stru Product.	2037	2000	1726	2331	2169	1800	1875	1202	1766	weighing
JA (A	<u>.</u>		TIV:	( 50	ll) diganis	0,8	0.00	49,0	113.7	76.3	17.0	113,6	67.0	13.0	aff sample
R JIN	20	,	, }	len	Counts Act	9 07	30.1	10.6	3,3	2, 3	30.6	20,1	30.3		d for a sm
S FO	ដ			ıçəu	Turns per l	17.09	31.80	81.13	16.45	12.02	9.73	16.85	20.74	83.73	total love l
SULT	7	301 au	RENG LEGAC FARTICULARS		Draft.	5 07	6.08	0.02	5.81	13	8.30	6.10	6.13	8.67	that the
	2		ייל אוני ויי	for wig	slbalq2 .K.T.n	10 100	10500	10130	10100	10250	9500	10,200	10200	10150	to noted
TEST	릐			Holler 12	Front Speed, R.1	206	671	141	66	187	140	218	180	165	11 ls to
T 5	=		_	ទារព្រះលើ សមាធារា	Yern Bry per 100 s per hour.	15	•	9	•	*	7	ع	-	4	-
Table 20.—SPINNING	2		7 <u>2</u>		real latoT	0.22	•	:	15.0	:	:	13.6	:	:	
SPIN	6	1	Waste Percentages.	48	oI zalaaiqê	0.4	:		0.3	:	:	6,9	:	:	
<u> </u>	er.		ere Pr	\$-0.I	Card Room	17.5	:	:	10.1	:	:	3.5	:	:	
 ble 26	-		≨ —	COI	Вјом Вооп	9	:	:	5.0	:	:	5.4	:	:	1-6
<u>-1</u>	-		( 60	il) oktar	Welght of Sa	22			<b>2</b>			13	·		r of rin
	*3	·· _		-Jeu	Counts Norm	ន	8	9	8	8	9	ន្ត	8	- <del>-</del>	Dlamet
	4	-		Date	Splaning.	9-7-36	8-7-30	9-7-30	28-4-37	28-4-37	20-4-37	2-5-39	2-2-3	3-5-8 88-73-8	#rr.
?	•	•	-	Ş		1037-30	1935-36	1937-30	1936-37	1939-37	1030-37	1037-38	1037-38	1037-38	ino front ro
	9	.		Coffee		Jinfa	Jula	Jiafr (Africau).	Jlnja (African).	Juja (African).	Jinsa (African).	Jhj. (African).	Jinja (African).	Jing 1. (Afric 111).	"Diracter of thing frame front roller-1". Diameter of rings-18".
	•	-  -		- Summy	No No	3208	3268	3308	0898	9888	3680	e de de	9205	4035	*Dimet

### 1.—JAGADIA COTTON.

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample. No.	Cotton.		Season.
1010	Jagadia		1930-31
1317	Jagadia		1931-32
1779	Jagadia		1932-33
2375	Jagadia		1933-34
3164	Jagadia		1935-36
3628	Jagadia	••	1936-37

### I. SPINNING TESTS.

### 1. Treatment:-

(a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1925 26 and 1936 37 .—Honner hale opener, Horizontal cleaner, Crighton

### TECHNOLOGICAL REPORTS

03

## COTTONS SUPPLIED BY THE AHMEDABAD MILLOWNERS' ASSOCIATION.

The samples supplied through this Association are restricted to only three cottons, viz., Jagadia, Bawla and Kadi. They also represent early arrivals of the crop in each season. The valuation reports of these samples were also made by the Grader (Major Ellis Jones) upto 1931-32 and thereafter the mills supplying the samples were requested to send their own valuation reports.

Weight of 10 flat strips Remarks	11.2 grams Staple regular in length and of good strength.	· · ·	free. 17-8 grams '	22.6 grams	free. 14.0 grams	neppy.
(b) Yarn	; 		JAG	, ,		
	1930-81.	1031-32	1932-33.	1033-34.	1935-36.	1936-37.
Evenness	Teron		Fairly oven	Almost clean Evon Almost free of nep.	Even	Almost clean Even. Slightly nepp

3. Spinning Test Details and Results.—See Table 1 on page 145.

### 2.—BAWLA COTTON.

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample	Cotton.	Season.	Somple No.	Cotton.	Season.
No. 1011 2376	Bawla Bawla		3630	Bawla	1936–37.

### L-SPINNING TESTS.

### 1. Treatment:-

- (a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1936-37:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1936-37:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

### 2. Spinning Master's Report:-

### (a) Cotton:-

							Bawla.	
					1930-31.	i	1933-34.	1936-37.
Colour	••			•••	White; bright	•		White to creamy-
Meanliness	••		••		A trifle leafy	••	white; bright. A little leafy wit occasional stains	white; bright, hA little leafy; a little stained.
Feel					Good		Good smootle .	. Good.
Ginning and	Neppi	ne*-		••	Very well-ginned	• •	Well-ginned .	. Well-ginned.
Seeds	;		1		1% unginned	٠.		
Card sliver	••			٠	Clean	••	Almost clean .	. Good; almost ckan.
Card web					Very good		Full	. Good ; nep-free.
Weight of 10	lat 6	trijs	••		9-9 grains		19-2 grains .	. 15-0 grams.
Remarks	•	••	••	••	••		,	
(b)	Yar	n :	-					
					<u> </u>		BAWLA.	
					1930-31.	Ī	1933-34.	1936-37.
Cleanlines.					Clean		A little leafe	Slightly leafy.
Erenness		٠,		••	Even		Even in 2014 only	·Even
Seppine-s		٠,	•	••	Almost free of nep	.  .	A little neppy	Fairly free of nep.
Slubbiness	••	٠.		.,			••	·

<sup>3.</sup> Spinning Test Details and Results :- See Table 2 on page 147.

••	L.—GRADER'S REPORT * FOR BAWLA COTTON.	R BAWLA COTTON.	
	*	Влимы	
,	1930-31.	1033-31.	1936.37.
Contract valued under	Broach;	Broach.	Broach.
Class	Fine.	Fine.	Fine
Colour	White.	White.	Shade dull white,
Staple Length	One inch.	15/16 inch.	13/16 inch.
Staple Strength	Foir.	Fair.	Fair.
Regularity3-31	Fair.	Fair.	Fair.
Value above or below Contract rate? al.	Rs. 55 on.	Rs. 22 on.	Rs. 5-10-0 off.
Basis	R4. 205.	Rs. 212.	Rs. 245.
Date of Valuation	26-3-31.	11-6-34.	33-3 37.
Remarks	:	:	·
	Table 2.—SPINNING TEST RESULTS FOR BAWLA COTTON.	TS FOR BAWLA COTTON.	

	17	IVE	_	Testing Roun.	ق ا	FG.	l:	2	ž	89	99	67	
	50	HELATIVE HEMIDITY (%).		mooff yalualq8	£	旨	15	2	11	89	98	10	
	53	Temper- Atore (° F).		moon Zulaniqž	2	35	98	98	8	8	90	8	
	ñ			Tarns per Inch. Artual.	16.0	20.1	17.4	21.1	8.53	17.1	15.3	17.3	
	ā		-	News per yand.	1.		10.	80 01	13.	1.5	1.8	cī ci	
	31	i	-	Evenness Class.	-	-	=	~ 53	0	e1		4	
	21	irs.		Count-Work	2023	2108	2701	2500	2512	2873	2526	2202	
<b>:</b>	G.	YANY TF-Y RESULTS.	BALLISTIC.	Work of Rupfure (lach-lò.)	103.8	85.0	130.1	80.0	76.8	208.2	165.0	112.0	
	2	YARY T	A	Jeutol, edmod	10.8	21.8	19.8	20.2	33.1	13.8	10.9	20.02	
_	<u>~</u>			dignerië-Sanoù i stoubori	1011	1045	1691	1185	1313	1280	1159	1018	
BANKE	17		LEA.	(.edf) (lhaorth	31.1	2.5 5.5	53.3	50.5	30.3	80.8	1.11	31.0	
	10			Counts Actual.	1.05	21.7	20.3	20.4	33.5	14.1	16.3	20.2	
	2		,	dont rog earu'l	17.08	20.71	17.99	21.80	23.20	14.08	15.07	17.08	
NESOLL S	11	OULARS.*		. יושנוי	0.41	6,38	0.00	6.28	7.21	4.17	5.01	5.05	
-	2	FRANT PARTIQUEARS		Spinilo Spreil, R. P. M.	8030	9:200	001.0	0.500	9300	8200	8200	8600	
724 7	7.7	RING FRA	,Leo.	Front Roller Sp R. P. M.	21 4	162	10.2	160	151	202	107	176	
Table 2 Sr Inining	11		not Dot	Lum Dreakages 100 spindies p	ଶି	7.	10	(=	ř	1-	9	31	
77.77	10	iers.	_	f.»-od lnioT	15.7	:	18.8	:	:	18.0	:	:	
1.7	6	RCENT		Shlaning Luss.	0.8	:	·,	:	:	0.4	:	:	
200	œ	Waste Pprcentages.	'Pi	Card Room Los	8.0	·	9.0	:	:	8.0	:	:	
4	7	W.	144	Blow Room Fo	5.5	:	9.7	. <b>:</b>	:	9.		:	
	9	.(.e.(	) olq	mad to thight	×		9	٠.				, -	
	,		r	animoZ +1mio?)	Ç	5	٥ <u>٠</u>	G5	ಕ	77	16	ଶ	
	-		- •	Date of Spinating.	26-3-31	27-3-31	11-7-31	12-7-34	12-7-34	28-5-37	25-5-37	25-5-37	
	~	_		Sta40n.	1930-31	1930-31	1933-34	1933-34	1073-34	1936-37	1036-37	1930-37	
	-1	_	-	Cotton.	Bawla	Bawla	Bawla	Bawla .	Bawla	Bawla	Bawks	Bawla	
		r.		S unple	1011 B2	1011 B2	2376 Be	2376 Br	2376 B:	3630 Br	3630 B:	3630 Br	

\* Diameter of ring frame front roller—7. Diameter of rings—11.

1 It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

### 3.-KADI COTTON.

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1012	Kadi	1930-31
1318	Kadi	1931-32
2377	Kadi	1933-34
3165	Kadi	1935-36
3629	Kadi	1936-37

### I.—Spinning Tests.

- 1. Treatment :-
  - (a) Blow-room.—Upto 1933-34:—Porcupine, Crighton (twice), Hopper, Scutcher (2 times).
    - 1935-36 and 1936-37:—Hopper bale Opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
  - (b) Card-room.—Upto 1933-34:—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1935-36 and 1936-37:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.
- 2. Spinning Master's Report :-
  - (a) Cotton :-

			•			Kadi.		
	_			1930-31.	1931-32.	1933-34.	1935-36.	1936-37.
Colour	••	•••		White; bright.	White; bright	Creamy-white	White to creamy-white; brightish.	White to creamy-white.
leanliness	••	•	••	Leafy	A trifle stained; fairly leafy.	Very leafy with occasional stains.	Leafy	A little leafy a trifle stain ed.
eəl .				Good	Good soft	Good	Good	Good.
mning And No	ppiness		••	Very well-gin- ned.	Well-ginned	Well-ginned	Well-ginned	Fairly well-gin ned.
eeds	••	••		1% unginned			••	••
ard Sliver	••	•		Clean	Almost clean	Almost clean	Almost clean	Good ; almos clean.
ard Web		•	ŗ	Very good	Even and nep-	Full	Even and nep- free.	Good.
Veight of 10 fl	at strip	,		•	13.0 grams	20.7 grams	15 · 3 grams	,
temarks	٠,	· · ·	٠	i				Wasty in Blow room and card
(1	) Y	arn :			<del>'</del>			
	· į	• :				Kadi.	1	
· · · · · · · · · · · · · · · · · · ·				1930-31	1931-32.	1933-34.	1935-36.	1936-37.
Cleanliness				Clean	Clean	Almost clean	Almost clean	Almost clean.
Evonnes		•		Even	Fairly even	Even in the two lower counts.	Even	Fairly even.
Noppiness	•	••	••	Almost free of nep.	Practically free of nep.	Almost free of nep.		Fairly free of
				1	t .	_	1 1	-

	-		TI	1 1	-GRADER'S REPORT* FOR KADI COTTON.	S REI	ORT	0 <u>H</u>	R KAI	03 IC	TTON	•			
			والمتحادي						-	KADI.	,				-
		1	1030-31.			1931-32.	<b>း</b>		ä	1933-34.			1935-36.	•	1936-37.
Contract valued under	:	Broach		:	Broach Dhollera	Dhollera		<u> </u>	Broach	:	•	Broach	:	:	Broach.
Class	•	Fine	. مر	:	Fine	:	:	Fine	ne	:	:	. Fine	:	:	Fine.
Colour	;	White:	91.	:	White	:	:	<u> </u>	White	:	:	White	:	:	Dull white.
Staple Length	:	11/16 inch		:	15/16 inch	də	:	15	15/16 inch	:	•	15/16 inch	.:	:	15/16 inch.
Staple Strength	:	Fair	J. m.	· .:	. Fair	:	:	Fair	ir	:	:	Fair	:	:	. Fair.
Regularity	:	Fair .	~	:	Fair	:	;	<u>E</u>	Fair	:	•	Fair	:	:	Fair.
Value above or below contract rate	:	Rs. 65-70 or	е 	:	Rs. 15 on	:	:	<u> </u>	Rs. 32-12 on	-	:	Rs. 7-8 on	: #	:	Rs. 6-4-0 off.
Basis	;	Rs. 205	· · · · · · · · · · · · · · · · · · ·	•	Rs. 170	:	:	_ <u>#</u>	. Rs. 196	:	:	Rs. 200	:	<b>;</b> ,	Rs. 249-4-0.
Date of Valuation	. :	26-3-31		· · · · · · · · · · · · · · · · · · ·	5-5-32	:	:	<u> </u>	23-4-34	:	•	1-4-36	:	:	2-4-37.
Remarks	`.:		:			:				:			:	a*)	•
	٠, ،		<b>"</b>	Report	* Reports since 1933-34 are made by the mill supplying the sample.	3-34 ar	a made l	oy the	mill sup	plying t	he sam	ole.	•		₽5 <sup>*</sup>

	27	itive rr (%).		Testlag Room.	9	2	8	<b>3</b>	Ę	3	2	R	Ħ	6	8	
	92	HONDOITE (%).	.,	moon galaaiqə	5	67	5	8	15	÷	12	8	. 69	8	8	
	ä	LEMPER- ATURE (°F.)	•1	meoR Balaalgë	12	12	8	£	25	泵	ű	l iz	æ	3	2	
:	57			Turns per inch. Actual.	17.0	19.8	17.6	20.3	17.2	18.9	9.19	17.5	18.7	18.2	17.0	
•	÷.			Aeps per yard.	1.0	1.5	0:1	1.5	1.2	.1.5	8.0	9,0	8,0	1.8	1.8	g
31				Trenness Class		4	*	29	က	*	2	. =>	*	62	*	s shown h
	17	Try Resours.		Count-Work Product.	2002	2028	2110	2170	2360	9230	2002	2713	0900	2270	0200	er of ring fame front roller—1.". Diameter of rings—11". Ighing 10 lbs, or thereabout; for buik sample spun under mill conditions it would be less than shown here.
Ž.	ន	I TPT I	Barlstio.	Work of Hupture (fuelt-lb.)	105.8	25.1	105.1	03.0	118.0	0.0	15.4	116.8	97.1	130.8	102.0	it would b
orro	19	Тапч		Counts Actual.	19.8	24.1	20.3	23.4	19.0	24.1	20.6	10.8	83 63	16.3	20.1	onditions
FOR KADI COTTON.	18			Count-Strength Product.	1164	1035	1180	1170	1346	1315	1140	1343	1162	1102	940	11°.
RA KA	17		LEA.	( स्वी) त्रीक्षकारोह	6.83	69.0	50.0	50,8	68.3	55.6	38.5	68.5	18.2	g.,	16.3	of rings sepan un
G TEST RESULTS	10			Counts Actual	10.8	8.13	10.0	2.2	10.7	5	30.0	19.0	25.1	18.6	5.3	Diameter of rings—11°
	16			Jams ber inch-	17.08	20.74	17.08	20.74	17.08	EF.01	23.11	17.08	19.73	15.07	17.08	ller—F'.
	==	Particulans.		Dran.	17.9	6.54	8,	4.54	6.10	6.43	6.87	6.83	6.07	=	4.07	• Diameter of ring frame front roller—f. ample weighing 10 lbs, or thereabout; for
	, <b>21</b>	FRAME PART		Apindie Speed, R. P. M.	8020	0200	0098	0990	0500	9650	9500	9700	9700	97.6	9500	ring ftam ig 10 lbs.
		RING FR	beeq	Front Roller Speed,		162	101	168	105	178	151	101	174	108	163	ianeter of its weighlic
Table 3.—SPINNIN	ដ		per Der	Larn Breakages 300 spindles hour.	52	8	105	ឥ	20	#	S	ន	#	8	<b>4</b>	† It is to be noted that the total loss is for a small sample wel
3	22	03.9.		TesoI Lesof	18.1	:	18.1	:	24.0	:	:	20.1	:	20,5	:	a for a g
ble		Waste Percentages.		, saoI galnalq2	0.0	¥-	1,24,	- 30-	*0.7	3 e. h.	:	0.5	:>	0.6	:	2 10.91
F	80	E.		so.I moosi bia?	7.0	:	7.0	:	10.8	:	:	, e1	:	8.0	:	the tot
.، خ	<u>.</u>	) B	51	Flow Room Los	10.2	:	10.6	•	14.2	:	:	12.5	:	12.2	:	rd that
	. 13.0 . 21	· U	idi) el	ques, to stagle V	a.		2	`	2			. 8		2		be not
	13		+	fenimoM eintio	. A. OS	<del>-</del>	ន	22	ន	7	8	ន្ត	24	2	82	It is to
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